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Tamil Arasu

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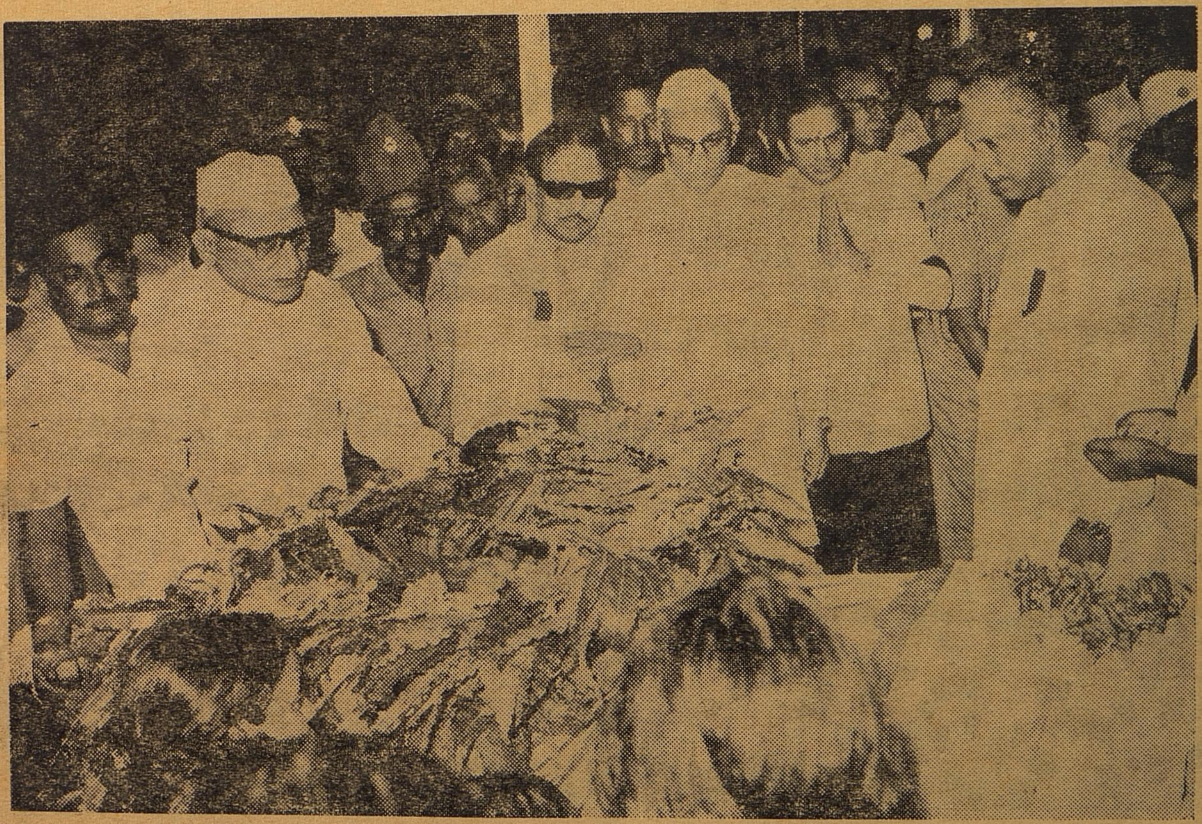
CONTENTS

Urban Land Tax revised upward ..	5
At last rice from Thailand	6
Karunai Illangal to help the orphans ..	8
Triple role played by the Tamil Nadu Agricultural University ..	11
How come Tamil Nadu stands first in Family Planning?	15
Prevention of Mycotoxin	33
Road Rules for Pedestrians ..	41
Employment situation in Tamil Nadu during May '75	47

Homage to Late Thiru N. V. Natarajan



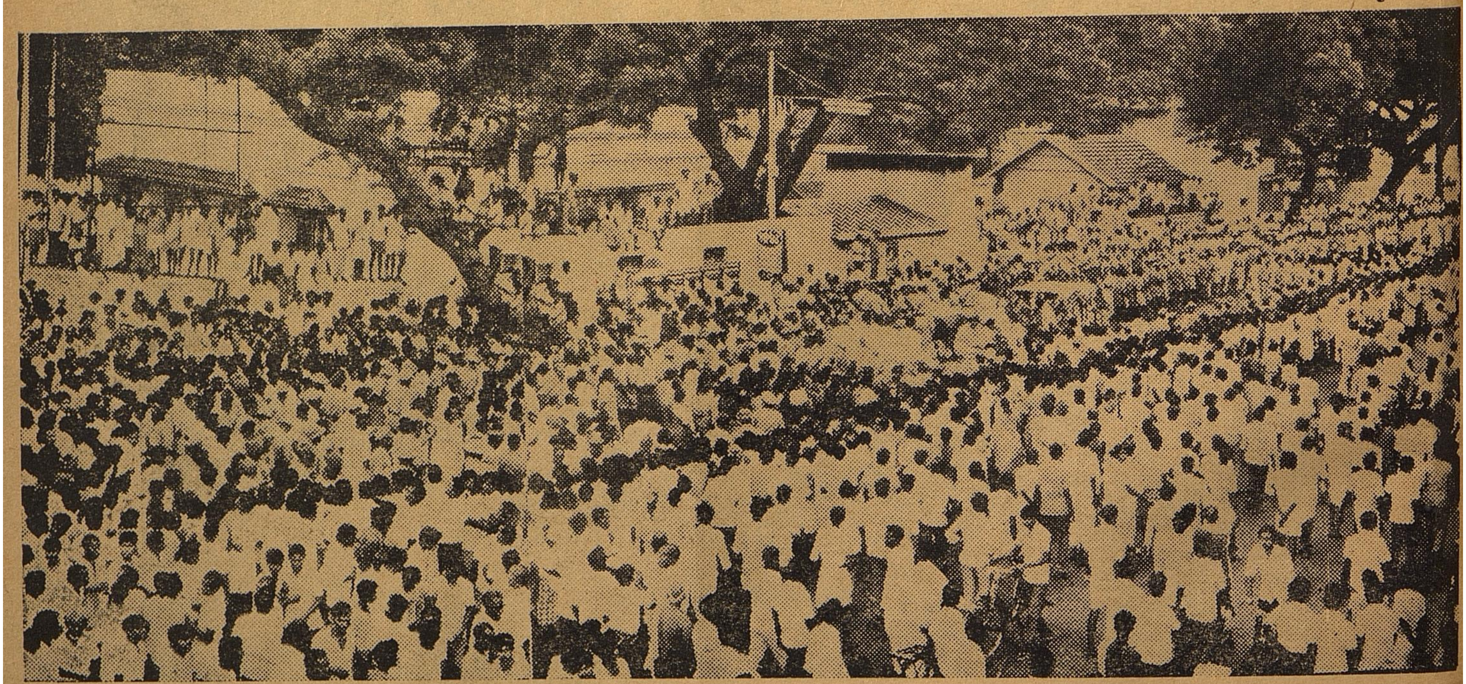
Thiru K. K. Shah, Governor of Tamil Nadu placing Wreath on the mortal remains of Thiru N. V. Natarajan, Minister for Backward Classes.

MINISTER N.V. NATARAJAN — HE DIED FULL OF HONOURS

Tamil Nadu mourns the passing away of Thiru N. V. Natarajan, Minister for Backward Classes at 2-45 A.M. on 3—8—1975. The State Government observed a 3-day mourning and all Government Offices and educational institutions in the city as also a large number of private undertakings were closed on Monday, 4—8—1975 as a mark of respect to the memory of the departed leader. The funeral took place on 3—8—1975.

Thiru Natarajan was a member of the Tamil Nadu Legislative Council from April 21, 1964 and was the Government Whip in that House for some time. He joined the State Cabinet in August, 1969 shortly after Dr. M. Karunanidhi became the Chief Minister and was assigned the portfolio of Labour and Backward Classes. After the mid-term elections in 1971 he continued to be the Labour Minister till January 1, 1973 when he was put in charge of Backward Classes alone. Thiru Natarajan was primarily a Tamil Journalist and was Editor of a Tamil weekly, "DRAVIDAN."

PEOPLE'S HOMAGE



The long funeral procession of the departed leader Thiru N. V. Natarajan, Minister for Backward Classes. People in thousands thronged to pay their last homage to their leader.

Ordinance To Revise Urban Land Tax Upward

The Governor of Tamil Nadu has promulgated an Ordinance called The Tamil Nadu Urban Land Tax Act (Amendment) Ordinance, 1975 bringing about an upward revision of the urban land tax. In addition, the Ordinance brings about a comprehensive restructuring of the urban land tax basis so as to make it sure and certain that " no one can escape the Ordinance and that none will be able to beat down the objective behind it." The Chief Minister of Tamil Nadu, Dr. M. Karunanidhi, has stressed that the Ordinance is in line with the Prime Minister's 20-point programme and its objective that there should be no concentration of wealth in the shape of urban land. The Ordinance comes into effect from 1st July, 1975 and it covers for the first time, other cities in the State—Madurai, Coimbatore. Tiruchirappalli and Salem, in addition to the areas adjoining the outer-limit of Madras city upto 16 km. extent.

Background story of Urban Land Tax

The Urban Land Tax was introduced in 1963 with the enactment of Tamil Nadu Urban Land Tax Act. But the Act was struck down by the High Court on the ground that the levy of Urban Land Tax on the basis of average market value was discriminatory violating Article 14 of the Constitution of India. The validity of the Act was upheld by the Supreme Court in 1969 on an appeal made by the State Government. The Government then resumed the assessment and collection of Urban Land Tax in 1969. The Government had also ordered that the arrears falling due relating to 1963 to 1971 should also be collected in instalments.

The Act originally provided for the tax at an uniform rate of 0.4 per cent of the market value and covered only Madras City. The Act was amended in 1971 providing for slab rates and exempting holdings of one ground and less. The amendment also extended the tax provisions to the City of Maudrai and Municipal towns of Coimbatore, Tiruchirappalli and Salem. The Act was again amended in 1972 which provided for the exemption of holdings upto two grounds.

Under the Act till the end of 28th February, 1975, a sum of about Rs. 7.17 crores only had been collected against the total demand of Rs. 12.93 crores leaving a balance of Rs. 5.76 crores. The actual collections under this head had been of the order of only Rs. 1.25 crores for the years 1972—73 and 1973—74.

Though this tax head seems to be of minor importance at the first instance, in terms of both revenue and number of urban centres covered, it is highly significant by virtue of the fact that the total demand under urban land tax is almost equal to the basic land revenue (excluding irrigation receipts)realised for the entire State.

SALIENT FEATURES

Under the reorganisation, the urban land has been divided into two categories—residential and non-residential—and different rates of tax have been prescribed for each. The new rates will be deemed to have come into effect from July 1, 1975.

Residential lands upto two grounds will continue to be exempt from the levy ; but when it exceeds two grounds, the whole extent will become liable to the levy. There is no exemption in the case of non-residential lands. The concession hitherto allowed for lands with owner-occupied buildings has been withdrawn.

There is no change in the rate of tax for holdings between two grounds and five grounds used for residential purpose (0.7 per cent of the market value). But, for lands above five grounds, the tax rate increases progressively from one per cent to three per cent of the market value. For non-residential lands, the tax ranges between 0.5 per cent for lands upto two grounds and 6 per cent for those above 20 grounds.

The tax revision has been decided upon with a view to augmenting the State's resources and the additional income therefrom will be earmarked for slum clearance work, according to an explanatory statement appended to the Ordinance.

The additional income expected from the changes is about Rs. two crores, while the annual revenue from urban land tax now amounts to Rs. 1.6 crores.

Revised Tax Rates

The following are the revised rates of tax :

Residential land (including vacant land) : Upto two grounds—no tax ; above two ground but upto 5 grounds—0.7 per cent of the market value ; above 5 grounds but upto 10 grounds 1.0 per cent ; above 10 grounds but upto 20 grounds—2.0 per cent and above 20 grounds—3.0 per cent.

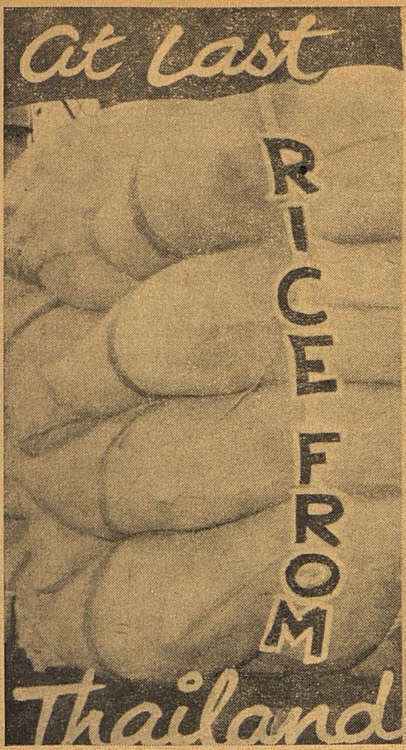
Non-residential land : Upto two grounds—0.5 per cent of the market value ; above 2 grounds but upto 5 grounds—1.0 per cent ; above 5 grounds but upto 10 grounds—2.0 per cent ; above 10 grounds but upto 20 grounds—4 per cent; and above 20 grounds—6 per cent.

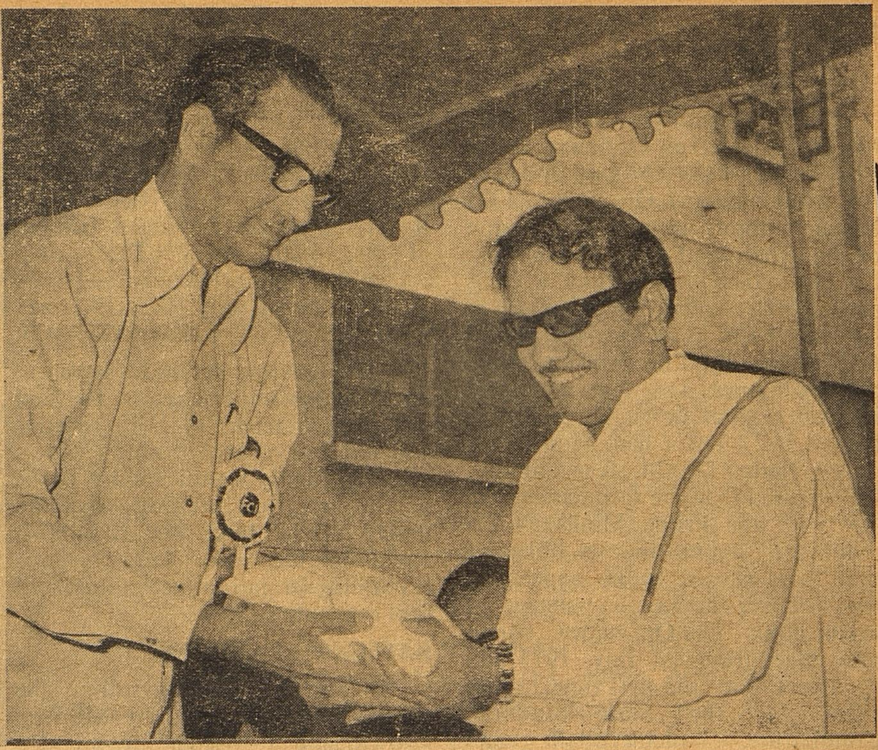
(The existing rates uniformly applicable to all urban lands are : Upto two grounds..no tax ; 2 to 5 grounds—0.7 per cent ; 5 to 10 grounds—0.8 per cent and above 10 grounds—one per cent.)

For the purpose of determining the amount of urban land tax, the market value as on the date of the commencement of the Ordinance (July 1, 1975) will be the basis. In the case of any urban land which is used both for residential and non-residential purposes, the land will be deemed to be used for non-residential purpose only, irrespective of the extent of the land used for such non-residential purpose. Where any land held by the same owner has been sub-divided after July 1, 1975 the sub-division shall not be taken into account and the tax will be determined as if no such sub-division had taken place.

The market value of lands in the extended areas will be as on July 1, 1975, while in the City it will be as on July 1, 1963.

When the Act was extended to Madurai, Coimbatore, Salem and Tiruchi with effect from July 1, 1971, the market value of lands in those towns was determined as on the date of extension—July 1, 1971.





Rice from Thailand has begun to arrive at Madras Port. The first consignment of Thailand rice totalling 9,800 tonnes was formally taken over by the Chief Minister in person from the Food Corporation of India on 31—7—75.

Taking delivery of the rice Dr. M. Karunanidhi, Chief Minister, expressed satisfaction that the Centre had acceded to the request of the State Government to import rice. " It only shows that you can achieve results by means of genuine requests followed up persistently."

The Chief Minister extended his sense of gratitude to the Central Food Minister, Thiru Jagjivan Ram, and other Ministers for their response to the State Government's pleas. He wished for the day when the State's food problems would be over and when it could again be surplus so as to be able to help other States as before.

Thiru S. Madhavan, Minister for Food, hoped that Tamil Nadu would get imported rice at the rate of a ship a week to tide over its present difficulties.

Earlier, Thiru T. T. P. Abdullah, Zonal Manager, Food Corporation of India, handed over a small packet of rice to the Chief Minister symbolic of the handing over of the first consignment of Thailand rice to the Tamil Nadu Government by the Government of India. Besides the present consignment of 9,800 tonnes rice, a second shipment of 11,400 tonnes from Thailand is expected next week.

The Zonal Manager said that except for a small quantity for Kerala, the rest of the one lakh tonnes of rice now being imported from Thailand by the Government of India is intended for Tamil Nadu.

Thiru R. Narayanaswami, Joint Manager, Port operations, F.C.I. told pressmen that negotiations were on for importing another one lakh tonnes of rice from Thailand from October to December, The import of one lakh tonnes in the first deal will last till October and the FCI has charted 10 vessels, mostly Indian, to bring them. The first consignment of 9,800 tonnes of rice is expected to be cleared in about six days at the rate of 1,500 to 2,000 tonnes a day.

The Tamil Nadu Civil Supplies Corporation has already organised the road movement. The FCI has geared up its administrative machinery to cope with the increased volume of foodgrains and fertilisers expected in the port in the next three months. In the next two months, 1,50,000 tonnes of foodgrains are expected to be unloaded through the Madras Port. The Port Trust has provided an additional berth for food-grains as a special case and on a temporary basis. The FCI has a plan to discharge foodgrains at the new ore berth in Bharathi docks. The Port Trust and the Railways have been extending their maximum co-operation to FCI to maintain a discharge rate of 7,000 tonnes and clearance rate of 6,700 tonnes a day of food and fertilizer." The Railways has also made available block rakes to maintain an average of 150 wagons a day. The rice shortage of Tamil Nadu is likely to persist well into December this year and the present arrangements are likely to take care of the situation to a great extent.

—R. N.

—o—

TO SECURE A BUMPER CROP AFTER THE DROUGHT

More Seeds Fertilisers And Pesticides Assured To Farmers

Only assured supply of agricultural inputs such as seeds, fertilisers, etc. and credit to farmer community can ensure facilities for more production in the field. This is more so this year because of the severe drought the State faced last year which has sapped to the hilt the little financial capabilities of the tiller community. So this year the credit facilities to the tune of Rs. 100 crores for agricultural purposes has been extended to the tillers of the soil to see that nothing isleft to chance for better crop this year.

After the severe drought of last year the sowing season comes round once again. A major portion of land in Tamil Nadu is sown around July—August to coincide with the Tamil month of Adi. The Tamil Nadu Government has the painful realisation that many poor agriculturists would have consumed even seed paddy during the harrowing months of last year. So adequate budget provision was made to purchase and stock seed-paddy in a larger measure this year. Thus for the sowing season of July, 1975, the department is in a position to supply 18,000 tonnes of seed-paddy as against the normal annual distribution of 9,000 tonnes of paddy seeds. In fact well ahead of July, all the seed material has been sent to the Agricultural Depots.

Orders were also issued to supply 50 kgs. of urea per acre or in the alternative 100 kgs. of ammonium sulphate per acre against identity cards. Complex fertilisers will be supplied without any limit. There is no dearth of fertilisers. Adequate quantity of quick moving fertilisers like urea and ammonium sulphate have already been supplied to the districts.

MEASURES TAKEN

So far as pesticides are concerned, the following measures have been taken :—

1. Adequate quantities of Plant Protection Chemicals have been stocked in all the Agricultural Depots in the State ; and

Water for irrigation was released from Periyar dam on July 1, from Mettur dam on July 4 and from Krishnagiri on July 12. This brought agricultural operations to a full swing in the canal irrigated areas. The recent rainfall has helped preparatory cultivation and sowing in dry lands.

2. Two months' requirements of important chemicals are kept as reserve in the Central Godowns in all the districts to meet any emergency.

Adequate and timely measures have been taken for the supply of pesticides to the ryots for the next agricultural season so that Tamil Nadu farmers recovering from the shock of drought will not be allowed to face any sort of threat to a good crop this year.

Strategic Planning To Step up Agricultural Production

The strategic planning for increasing the input supply for agriculture is vital for stepping up agricultural production during the post-drought year. Inputs like seeds, fertilisers, plant protection chemicals and farm equipments will be made available in adequate quantities and at the proper time.

As is already known, the drought funds were utilised to a large extent in creating assets capable of providing a better base for agricultural production through investment on minor irrigation, digging of wells, installation of pumpsets and reclamation of lands.

The cost in-put is also being given equal attention. Assuming that the average production outlay per hectare in respect of irrigated area is Rs. 500 and that in respect of rainfed areas is Rs. 190 on a very conservative estimate, the total current production outlay works out to Rs. 244 crores. It is estimated that, by and large, the cultivators meet about, on an average, a third of their total production outlays out of their own funds. Assuming that about two thirds of production outlays are financed by borrowing, the total current short term credit requirement works out to Rs. 163 crores. As against this, the supply of finance by Co-operative which was about Rs. 8 crores at the beginning of the Second Plan, was increased to Rs. 26 crores at the end of the Second Plan and to about Rs. 70 crores at the end of the Fourth Plan. This year credit facilities to the tune of Rs. 100 crores for agricultural operations in the State will be extended by the Co-operative Department. Of this, as much as Rs. 15 crores will be disbursed as loan to farmers by the Land Development Banks for purchase of pumpsets, sinking of tube-wells, etc. Apart from this, steps will be taken to establish Producers Co-operative Societies to purchase paddy from member-producers, hull them and supply the rice to co-operatives for distribution to the public at large. Thanjavur district will be taken up first for this experiment.

The Karunai Illangal of Tamil Nadu

The opening of 52 Karunai Illams in Tamil Nadu to take care of about 3,000 orphans constitutes a water-shed in the concept of State-sponsored social welfare measures.

Till now the Hindu Religious and Charitable Endowments Department has been running nine orphanages through certain religious institutions with a total strength of 435 inmates at certain select centres. The Government decided that as a social welfare scheme some more orphanages (**Karunai Illangal**) might be started in all districts of the State to rehabilitate and afford facilities for food, accommodation and education for another 3,000 inmates of both sex and that the scheme might be implemented with effect from 3rd June 1975 coinciding with the 52nd birthday of the Hon'ble Chief Minister. Accordingly, orders were issued for the starting of 52 Karunai Illangal in various districts of the State with effect from 3rd June, 1975.

Of the 52 centres, eight ecntres will have a strength of 100 inmates each while the remaining 44 will have a strength of 50 inmates each, thus making a total of 3,000 inmates in all the 52 centres. Since the issue of orders, one additional centre at Vadapalani in Madras has been opened.

The selection of inmates and their admission into the Karunai Illangal will be according to the following priority :—

(1) children who have lost both their parents with nobody else to support and take care of them ;

(2) children who have lost their fathers only but the mothers are in such poverty-stricken circumstances as to be unable to support and take care of them ; and

(3) children who have lost their mothers only but the fathers are not in a financial position to support and take care of them.

No Discrimination of Religion in Admission

In the above Karunai Illangal only children of either sex in the age group of 5 to 10 years will be admitted. Once admitted, they will be eligible to stay on in the centres till they complete 18 years of age. There will be no distinction between Hindus and non-Hindus in admission

It has been decided that each centre should have exclusively male children or female children. For this purpose, in districts which have been allotted only one centre, the centre concerned will have only male inmates. In districts, which have been allotted more than one centre, some centres have been reserved exclusively for girls. It has also been ordered that if there are adequate number of eligible girls seeking admission into orphanages in districts which are allotted only one centre, then the Collectors concerned may select the eligible girls and send them on to the adjoining districts where centres have been reserved for girls.

For the purpose of scrutinising the applications and finalising the list of eligible candidates for admission to the various Karunai Illangal in each district, a Committee was constituted under the chairmanship of the District Collectors as follows :—

(*i*) Collector of the District—*Chairman.*

(*ii*) Deputy Commissioner, Hindu Religious and Charitable Endowments (Admn.) Department, having jurisdiction over the centres —*Member Secretary.*

(*iii*) District Backward Classes Welfare Officer—*Member.*

(*iv*) District Harijan Welfare Officer—*Member.*

(*v*) District Women's Welfare Officer—*Member.*

It has been estimated that the recurring expenditure on each inmate of the centres may work out approximately to Rs. 600 per annum and that the total annual recurring expenditure on running the centres including food, education, clothing medical aid, etc., for the 3,000 children might be Rs. 18 lakhs. Of this, 25 per cent of the recurring expenditure will be met by the Government while the remaining 75 per cent will be met from the surplus funds of Hindu Religious and Charitable Institutions. The Government will also sanction a non-recurring expenditure at the rate of Rs. 1,000 per inmate to each centre to meet the cost of buildings, etc.

All the 53 Karunai Illangal have started functioning, according to the reports received from the Collectors.

Details of the Pictures in the opposite pages :—

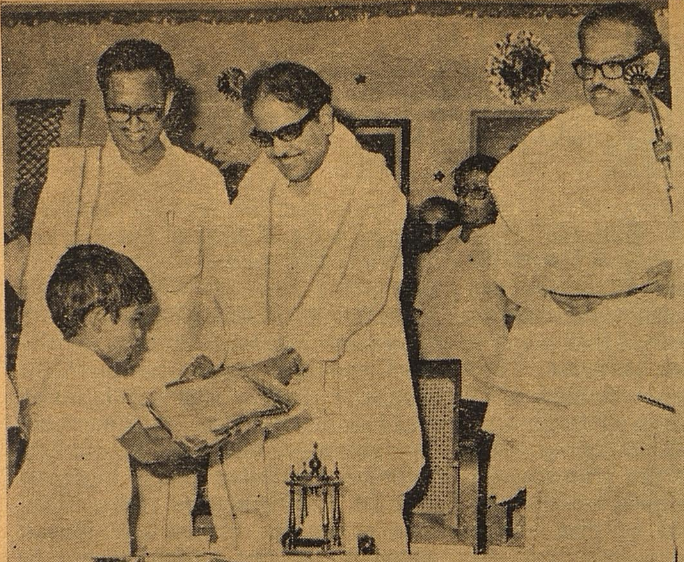
Top (L) The Chief Minister presenting dresses to the inmates at Pudukottai on 8-6-75.

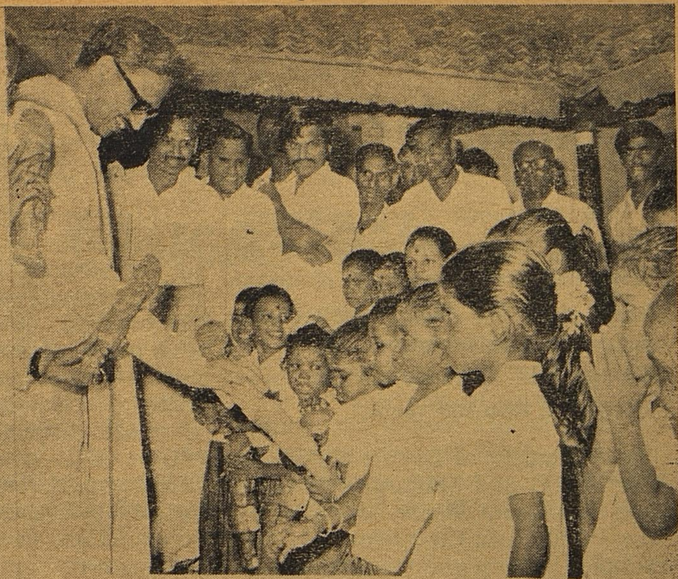
Top (R) Minister for Public Health distributing toys to the inmates of Karunai Illam at Vadapalani.

Centre : Karunai Illam at Mylapore.

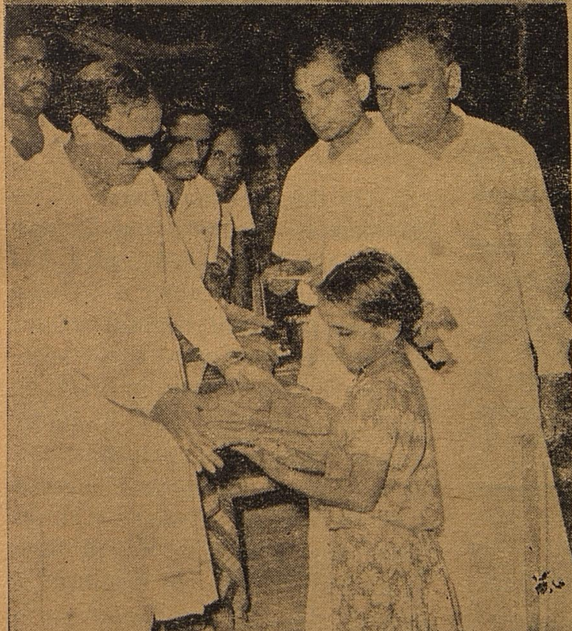
Bottom (L) Chief Minister presenting clothes to children of Karunai Illam at Mayuram.

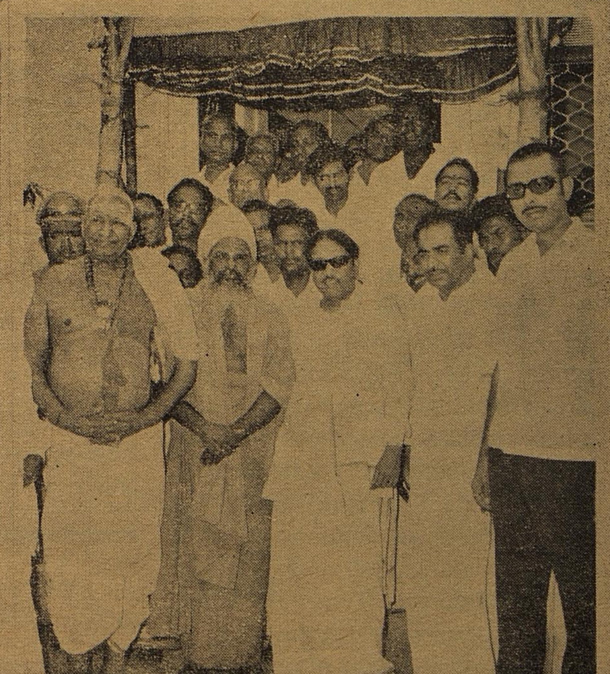
Bottom (R) Chief Minister inaugurates the Karunai Illam at Mylapore on 2-6-75.





The Set-up OF KARUNAI ILLANGAL (FOSTER HOMES)





CONTROLLED CLOTH

Consumer Co-ops. will advertise availability

The Consumer Co-operatives are the chief outlets for distribution of controlled cloth. But receipt of stocks is so sporadic that consumers are put to much inconvenience. Hence the Co-ops. will advertise the receipt of stocks and then sell them.

A Seminar of District Co-operative Supply and Marketing Societies and Wholesale Stores convened by the Tamil Nadu Co-operative Union adopted important resolutions touching business promotion, rationalisation of pay structure, procurement operations, etc. The Seminar felt that in each co-operative the Committee of Management should fix broad policy for procurement and leave the actual procurement operations to the permanent staff.

Minister for Co-operation, Thiru S. Madhavan, in his address, urged the delegates to look upon Co-operative movement and Civil Supplies Corporation as complementary to each other. He agreed that it was a good arrangement that the Civil Supplies Corporation looked after wholesale distribution while Co-operatives did retail function. The Minister said that the ultimate responsibility for distribution of essential commodities would be that of the co-operative movement and the movement should prepare itself for the task.

The Seminar resolved to publicise availability of controlled cloth and their prices through the various advertisement media. The Seminar wanted branches of consumers stores to be treated as separate unit for the purpose of levy of income-tax. District Co-operative Supply and Marketing Societies will be known hereafter as District Wholesale Co-operative Stores. Another resolution wanted the concurrence of the Registrar before any legal action was taken against consumer co-operatives for adulteration, etc. In another resolution the delegates wanted representation for wholesale stores in district development councils. About procurement the Seminar felt that it would be better if the Committee laid down broad policy and left the actual procurement to the permanent employees. For this purpose, the Seminar requested the Registrar to rationalise procurement arrangement and modify the by-laws.

The Spectacular Growth of Employees' Co-operative Movement in Tamil Nadu

The Employees' Co-operative Societies in Tamil Nadu have, by and large, given an exceedingly good account of themselves, according to Thiru B. Vijayaraghavan, I.A.S., Registrar of Co-operative Societies, Tamil Nadu. We had about 600 of these societies in 1960, and to-day they number about 1,000. As against only Rs. 6.5 crores of loans issued by these societies in 1960—61, in 1974—75 they issued about Rs. 75 crores. The magnitude of this achievement will be particularly clear when we take note of the fact that the 5,000 agricultural credit societies in our State distribute only about Rs. 88 crores as credit which itself is a considerable performance by All-India standards. Thus, the employees' societies, which are only 20 per cent of the agricultural credit societies in number, distribute about 90 per cent of the credit distributed by the agricultural credit societies.

In respect of overdues also, the employees' societies are the cleanest among the various types of co-operatives. The overdues in these societies are, on an average, only 2 per cent of the loans outstanding.

These societies borrow only about 15 percent of their lendings from the Central Banks whereas it is as much as 82 per cent in the case of agricultural credit societies. This is so because the employees' credit societies have a system of collection of thrift deposits from the members with reference to their monthly emoluments. Out of Rs. 30.74 crores held by these societies as deposits, as much as Rs. 28.89 crores represent thrift deposits of the members.

On the recommendation of the Santhanam Committee on Co-operation, the State Government had addressed the Government of India to treat the thrift deposits of the members of employees' credit societies in the same manner as provident fund contribution, life insurance premium and postal cumulative time deposits for the purpose of income-tax. If the Government of India grant this concession it will serve as an incentive to the members to increase their subscriptions towards thrift deposits.

By

THIRU B. VIJAYARAGHAVAN, I.A.S.,
Registrar of Co-operative Societies, Tamil Nadu.

Tamil Nadu Agricultural University

PLAYS TRIPLE ROLE IN AGRICULTURAL EDUCATION

The Tamil Nadu Agricultural University, unlike the conventional Universities, stands for bringing benefits to the farmers. In the triple role of teaching, research and extension education activities of Agricultural Universities, the need for greater co-ordination between them was keenly felt since their inception. The teaching programme, research projects and the extension education schemes are all directed towards the betterment of farming community. The classroom teaching is directly related to the present day scientific farming. The research projects are oriented towards the needs of the farmers and are meant to solve their problems and to improve their economic status. The extension education programme is to train the extension staff of the State Government and private agencies in the various activities to help the farmers.

Since the University came into existence, the syllabus in the colleges were revised and started new courses to meet the needs on the extension organization. As many as 973 Problem-oriented research Projects have been formulated in about 20 major branches to evolve new crop varieties, new methods of disease, pest and weed control to conserve irrigation water, to improve soil, to work out more economic crop rotations for different agro-climatic areas, etc.

Extensive use of Communication Media

In order to disseminate the scientific knowledge for the benefits of the farming community, extension workers and the public, a University Communication Centre was established. The scientific information is disseminated to various dailies and journals regularly through popular articles. Further, Farm and Home Unit, All India Radio, Coimbatore records radio talks, interviews, feature programmes with the scientists and broadcast, latest farm news on all aspects of farming and broadcast. The All India Radio send the questions received from the farmers to this University. The answers given by the experts are passed on to All India Radio for broadcast. The Communication Centre has published large number of pamphlets, booklets, technical bulletins etc.

There are two Extension Departments and two Farmers, Training Centres attached to the two Agricultural College and Research Institutes at Coimbatore and Madurai. Through these wings, they reach the farmers with latest knowledge in different branches of Agricultural Science. There is one National Demonstration Centre with four Subject Matter Specialists at Madurai. This Centre lays demonstration plots in 25 farm holdings on most modern scientific lines.

Mass campaign Approach in Extension Works

Extension methods are the tools for the extension workers to reach their clientele. Though there are numerous extension methods, only a few selected methods are commonly used by extension workers in the process of educating farmers on new form practices. In the present Mass Campaign Approach, the methods such as talk with slide show, use of flannelgraph, exhibition-cum-demonstration and discussion are in frequent use. But it is not known whether these methods either individually or in combination differ in their effectiveness in terms of the retention of knowledge by farmers. For how long farmers would remember major part of the information gained through these methods is also not known clearly. Seeking answers to these and similar questions will definitely help extension workers to choose the effective combinations of extension methods for different types of audience. Hence a research project was initiated with the specific objectives 1. to determine the relative retentivity of the knowledge gained through four selected combinations of extension methods ; 2. to study the quantum of knowledge retained at three different intervals of time and 3. to study the association between the retentivity of knowledge and personal characteristics such as age and educational status of farmers.

Procedure

The research project was designed to study experimentally the farmers' retentivity of knowledge on a selected farm practice taught through different combinations of extension methods. The four combinations of methods were (1) Talk with slide show and discussion; (2) Talk with flannelgraph and discussion ; (3) Exhibition-cum-demonstration and discussion ; (4) Talk with slide show and of flannelgraph and exhibition-cum-demonstration and discussion. The selected farm practice was the treatment of seeds of pulses with bacterial culture. The study was taken up with four homogenous groups of farmers consisting of 44 or 45 members in each, sampled from Periyanaickenpalayam and Karamadai Panchayat Unions in Coimbatore district. The four groups of farmers were randomly assigned to the four combinations of extension methods. The chosen farm practice was taught by means of each treatment. After exposure, the farmers in each group were asked at different intervals of time to reproduce what they had learnt on the practice. The first recall was made one week after exposure, the second recall three weeks after exposure and the third recall after a lapse of seven weeks after teaching. The verbal information expressed by the respondents was determined in terms of scores obtained by individual respondent. The data so obtained were statistically analysed.

Findings

1. Of the four combinations of methods, talk with slide show and use of flannelgraph and exhibition - cum - demonstra-

tion and discussion was found most effective in retaining knowledge (Mean score being 18.06 out of 20). Exhibition--cum--demonstration and discussion was the next best. (Mean score 17.08 out of 20). Talk with flannelgraph and discussion occupied the third place (Mean score 15.81 out of 20) and talk with slide show and discussion was the least effective (Mean score 12.98 out of 20). In effectiveness, the first two combinations were closer to one another when compared to the latter two combinations.

2. There was significant reduction in the retentivity of knowledge gained by farmers through each combination as the time passed.

3. Farmers were found to retain 97 per cent of the total message in the first recall (one week after) when the message was given through the combination of talk with slide show and use of flannelgraph and exhibition-cum-demonstration and discussion and this had fallen to 90 per cent in the second recall (three weeks after) and then to 84 per cent in the third recall (seven weeks after).

4. Through the combination of exhibition-cum-demonstration and discussion, the proportion of message retained in the first recall was 91 per cent and it was reduced to 86 per cent in the second recall and then to 80 per cent in the last recall.

5. In the talk with flannelgraph and discussion, retentivity of 85 per cent was recorded after one week, which was reduced to 80 per cent after three weeks and then to 73 per cent after seven weeks.

6. In the combination of talk with slide show and discussion, the amount of knowledge retained after one week was found to be 73 per cent. This was reduced to 67 per cent at the end of three weeks and 55 per cent at the end of seven weeks.

7. Age and educational level of farmers were found to influence the retention of knowledge gained through different combinations of extension methods significantly.

8. In general, young farmers had retained more knowledge through each of the combinations as compared to middle aged or old farmers. The old farmers when taught through the first combination were found to retain nearly as much knowledge as the young farmers had retained.

9. In general, farmers studied upto College level had retained more information than those having secondary or primary level of education. But it was found that farmers studied upto primary level slightly excelled the other two educational groups when they were exposed to the message through the first combination of extension methods.

Implications and suggestions

Talk with slide show and flannelgraph and exhibition demonstration and discussion, and exhibition-cum-demonstration and discussion are the most effective combinations of extension methods which can be used in the extension education programmes. These combinations are highly useful, particularly when the farmers are either old or less educated.

If the audience happens to be either young or well educated, then the combinations such as talk using flannelgraph plus discussion and talk with slide show plus discussion will also be effective. Of these two combinations, the former is preferable because of its higher effectiveness and ease in preparation and use. Further this combination is highly valuable and practiceable especially in these days when the production of colour slides is costly.

The study reveals that farmers are able to retain more than 75 per cent of what they had learnt through each of the four combinations of extension methods for the first two weeks. Though the combination of talk with slide show and flannelgraph plus exhibition-cum-demonstration and discussion, farmers are likely to remember this much of knowledge upto one month. As the interval between the exposure to the message and its point of application increases beyond one month, none of the combinations studied is likely to be effective to retain the message by farmers.

Over and above all these activities, the need for closer co-ordination between the teachers, research workers and the farming community was felt for on-the-spot study of the problems pertaining to scientific farming. Special problems needing attention by the Specialists could not be solved by the normal extension staff. Further specific problems relating to farming at a particular location could not be made available to the research personnels. Thus a need for closer activities between the research personnel and the farming community was felt in order to have effective and purposeful integration through co-ordinated activities of research and extension personnel of the University to benefit the farming community.

USEFULNESS OF FARM ADVISORY COUNCIL

The Farm Advisory Council has been thought of and started in December 1972. The Farm Advisory Council is formed with the Director of Extension Education, Coimbatore and the Dean, Agricultural College and Research Institute, Madurai as the Chairman and the Deputy Director of Agriculture, Farmers Training Centre at Coimbatore and Madurai as the Secretaries for the respective headquarters of Coimbatore and Madurai. The Subject Matter Specialists of not less than the rank of Associate Professor in the various Departments are the members of the Council. The Council will organise field visits of not less than 10 in a month. The field visits are meant for solving selected problems of the farmers in the above two Districts. The Farm Advisory Council will also review the working of the programme.

For the problems raised by the farmers either in person or through letters and on those problems posed by the Department of Agriculture varying specialised technical knowledge is required for the solution, the concerned specialists take up

these need-based research problems and make necessary field visits and trials. Usually for the first visit specialists in the cadre of Professor will visit the villages to make on-the-spot study of the problems. When they are unable to find a solution on the spot they will bring back the problems to the research laboratories to carry out suitable experiments to find solutions for the problems. During their visit they will discuss with the farmers the various problems in farming and will give necessary advice to help them to the maximum extent. By these means the experts may get firsthand knowledge of the farmers' problems and farmers will get the help of topmost specialist. Whenever field visits are made the extension staff of the Department of Agriculture will be informed so that they may also get a full benefit of the advice given in keeping up with the latest scientific information available. There will be closer co-ordination between the University and the Department and there may not be any duplication of work by them. This is important as the experts specialised in their own fields will help in solving the problems for which the normal extension staff do not have a solution.

300 problems solved

Since December 1972, a total number of 300 problems pertaining to all aspects of agriculture such as crop production, soil problem, pests and diseases, weed control, water management, farm machinery, tillage animal husbandry, forestry etc., have been tackled by the Farm Advisory Council, Coimbatore on various aspects starting from sowing of crops upto their harvest. Apart from the spot advice given, trials have been laid out in different centres. In relation to specific problems raised, followup action are taken during the subsequent visits so that the farmers' problems are tackled to their proper satisfaction. These visits not only help to tackle the problem of the individual farmer but also serve as demonstration centres on the scientific agriculture advocated by the University. As already indicated the entire set-up is meant to coordinate and cooperate with the Department of Agriculture and to tackle those problems which need special technical knowledge and skill and in no way complete with the normal working of the Development Departments.

Released by : The Communication Centre, Tamil Nadu Agricultural University, Coimbatore-3.

New varieties for prosperity

Four new varieties of cotton, red gram, tomato and pumpkin developed at the Tamil Nadu Agricultural University, Coimbatore, were released by the Vice-Chancellor, Dr. G. Rangaswamy.

The hybrid cotton, CBS 156, is claimed to be outstandingly superior superfine variety, both in yield and lint quality and gives and additional yield of one to four quintals of kapas per acre compared to the existing hybrids in the country, according to Dr. Rangaswamy.

He said this extra long staple superfine cotton has a staple length of 36mm and has been derived by crossing an American variety (Aglo) with a barbadeness strain (1085-6). It spins 120 counts equivalent to imported superfine Egyptian cottons and the lint is finer and stronger.

Dr. Rangaswamy told pressmen that the new variety on an average yielded a net income of Rs. 7500/- per acre. Some farmers have obtained a net income of Rs. 12,000/- from an acre. The yield of kapas ranged between 13 to 15 quintals per acre.

The Vice-Chancellor said the crop duration is only 170 days like other hybrid varieties. It is resistant to stem-weevil and verticillium wilt disease and has a wider adaptability and can be grown in large areas.

He said that trials in a number of places in Tamil Nadu and Maha rastra had shown very encouraging results.

Dr. Rangaswamy said there was already a wide demand for this variety. The University would distribute about 400 kg of seeds, priced at Rs. 300 kg to about 2000 farmers during the season. He said the State Government was planning to produce about 5000 kg seeds of this variety to meet the entire needs of the State.

Dr. Rangaswamy claimed that if this variety could be grown over an area of about one lakh acres in the country, it would be possible to do away with the present import of two to three lakh bales of superfine cotton, resulting in a saving of Rs. 100 to 150 crores of foreign exchange per annum.

The new C:-2 red gram is a short term variety with an improved plant type and high yield potential. It is suitable for both irrigated and rainfed conditions. It matures in 110-115 days and yields 1500 kg under irrigation and 750 kg under rainfed condition per hectare, the net profit being Rs. 1500 and Rs. 700 respectively.

This red gram is claimed to be superior to the existing Co-1 with an increased yield of about 25 per cent and with a reduction in duration by 20-25 days. This is a non-seasonbound variety and can be raised all round the year. The reduction in maturity time makes it ideally suited for cultivation as a mixed crop with groundnut as both the crops mature at the same time.

The new variety of tomato Co-2 gives an additional yield of 18.2 per cent. On an average it has given 41 tonnes of fruits per hectare. The seed content is moderate and the fruits are nutritionally superior with a higher ascorbic acid content. The net profit derived from a hectare is about Rs. 9500.

Source, F.P.O. Coimbatore.

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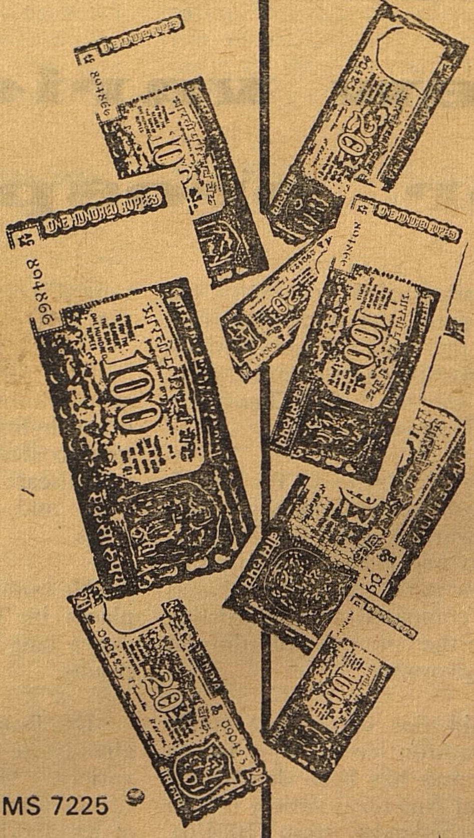

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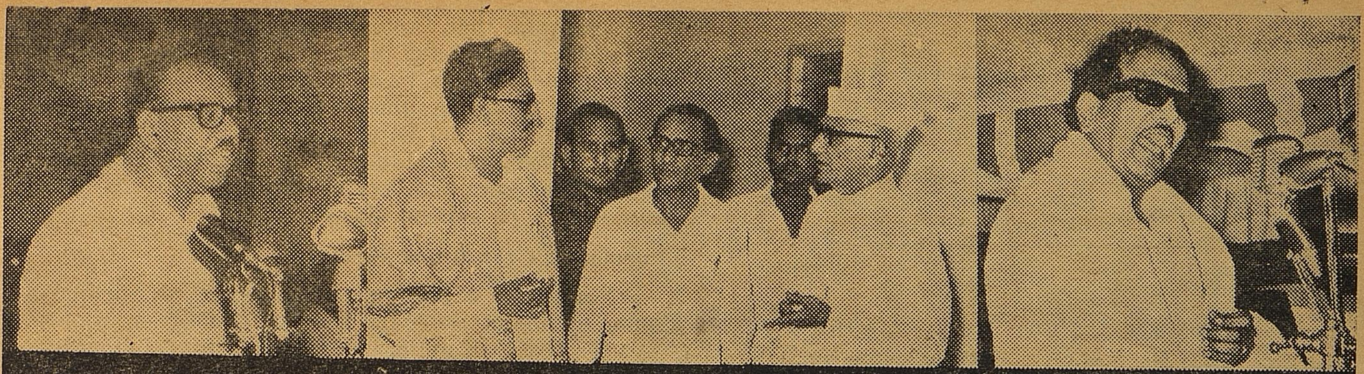

HOW COME TAMILNADU STANDS FIRST IN FAMILY PLANNING

Tamilnadu was the first state in the country to take note of the importance of the family planning programme for containing the population growth, giving due importance to contraceptives, sterilisation and legal abortions alike.

The Government of Tamilnadu had adopted the family planning as a Government sponsored programme as early as 1956. In the beginning, the tempo was rather slow as the people were not much aware about this programme, and it gained momentum only from 1965-66 onwards due to extensive drive.

To start with, family planning clinics were opened in certain Government hospitals in the State, to motivate all the fathers and the mothers who come to these centres, about the scheme and contraceptives were freely given to them. Father information centres and Mother information centres were established for mainly giving advice on family control.

From conventional methods for limiting the families, the Government then switched over to more permanent measures like IUD insertions and sterilisations such as vasectomy and tubectomy in order to intensify the programme. The intensive District Programme, integration of maternity and child health services with Family Planning, Post Partrum scheme and Training Programmes, have also played a significant role in the development of family planning programme in the State.

In order to achieve the national goal of reducing birth rate from 41.7 in 1961 to 32 in 1973-74 and to 25 by 1978-79 at the end of fifth plan, the family planning works have been intensified since 1971 through mass campaigns in the State.

The first mass vasectomy camp was organised in Thanjavur district from 20-5-1971 to 30-6-1971. As against a target of 2600 sterilisations fixed for the camp, the achievement was 4.591 i.e. 76.5% over the target. This had established that with a combination of dedicated and dynamic leadership at all levels, active involvement of all Government departments non-officials and the community at large, added with intensified propaganda effective motivation, excellent services, efficient administration, combined with concurrent appraisal and better feed back arrangements, it is possible to motivate large masses of of People in overcoming individual fears and resistance and make them accept sterilisation most voluntarily and willingly. This mass vasectomy camp programme was extended to all other districts excepting Kanyakumari district in 1971-72.

The gross amount spent on the Family planning programme indicates the accelerating importance given it. Table I furnishes the total expenditure on this programme and the percentage to total amount along with the corresponding figures for All India.

TABLE I.

Expenditure on Family Planning Programme and Percentage to Total Expenditure Tamil Nadu and All India.

Plan Period	*Tamil Nadu* Expenditure on family planning programme (Rs. in lakhs)	*Tamil Nadu* Percentage of family planning Expenditure to total Expenditure %	*All India* Expenditure of family planning programme (Rs. in millions)	*All India* Percentage) of family planning Expenditure to total Expenditure%
1951—56	0.236	0.003	1.45	0.007
1956—61	17.331	0.002	21.56	0.046
1961—66	153.072	0.441	248.60	0.290
1966—67	148.231	1.794	131.26	0.607
1967—68	109.897	1.254	265.23	1.269
1968—69	119.850	1.278	305.15	1.285
1969—70	188.990	2.208	361.84	1.770
1970—71	361.650	3.711	489.04	N.A.
1971—72	623.440	5.537	617.56	N.A.

The proportion of expenditure on family planning to plan spending in the state is generally more than that in the country as a whole showing the awareness of the Government of Tamil nadu about the vital role of this programme in the planning.

Table II shows the achievements under family planning programme in respect of Tamil nadu and India-Methodwise.

Table II

Achievements under Family Planning Programme Tamil Nadu and India.

Period	sation	IUD	Users of conventional contraceptives	Total acceptors	Equivalent sterilisation
Upto March					
Tamilnadu	306,572	2,460	..	309,032	307,391
India	1,525,343	812,713	1,318,657	3,656,713	1,919,090
1966-67					
Tamilnadu	248,242	5,295	..	253,537	250,005
India	887,368	909,726	464,605	2,261,699	1,229,329
1967-68					
Tamilnadu	128,166	9,542	19,255	156,963	132,942
India	1,839,811	668,979	475,236	2,984,026	2,102,407
1968-69					
Tamilnadu	113,534	25,358	25,716	164,608	124,113
India	1,664,817	478,731	960,896	3,104,444	1,904,469
1969-70					
Tamilnadu	112,155	41,609	40,997	194,761	129,414
India	1,422,118	458,726	1,509,378	3,390,222	1,700,809
1970-71					
Tamilnadu	72,030	53,596	71,657	197,283	95,825
India	1,329,914	475,848	1,962,347	3,768,109	1,652,059
1971-72					
Tamilnadu	245,784	37,419	121,128	404,331	268,298
India	2,187,336	488,368	2,353,503	5,029,207	2,546,250
	Grand Total Tamil Nadu				1,307,988
	India				13,054,413

Note : Equivalent sterilisations have been calculated by adding number of Sterilisations, 1!3 of IUD insertions and 1!12 of conventional contraceptives users.

The cumulated equivalent number of sterilisations upto 1971-72 for Tamil nadu is 1.31 millions while it is 13.05 million for India as a whole. **The state Achievement is 10% of the country.**

The number of acceptors of family planning methods per 1000 population is another factor which shows the success and otherwise of the programme with the masses of people. Table III gives the details not only for Tamilnadu and India, but also for three other southern states namely Andhra Pradesh, Kerala and Karnataka for a comparative study of the impact of the family control scheme.

TABLE III

Number of Acceptors of Family Poanning Methods per 1000 Population Tamilnadu, India and Southern States since inception upto October 1973.

State	METHODS		
	Sterilisation	IUDS	Conventional Contraceptive users
1. Tamilnadu	35.5	4.9	3.6
2. Andhra Pradesh	35.1	4.3	2.5
3. Kerala	30.4	11.7	3.7
4. Karnataka	21.4	9.0	3.1
ALL INDIA	24.9	8.3	4.1

It is clear that Tamil nadu stands foremost among the southern states and in the country as far as the permanent measure of birth limiting i.e. sterilisation is concerned though in other methods, the performance of the State is not very happy. It also indicates that the people of the Tamil nadu are fully aware of the hazards of large families and they want to do away the sufferings with a permanent check.

Population Growth and Ferility

Population explosion is a necessary and sufficient cause for undertaking the family planning programme on a massive scale in the Indian Sub-continent in general and in the State in particular.

The population of Tamilnadu enumerated at 1901 census and adjusted for the boundaries of the present State was 19.3 million. It rose to 33.7 million in 1961 and 41.2 million in 1971, indicating a growth of 114% since the turn of the century.

Table IV depicts the trends in the growth of population in Tamil Nadu along with those of India since 1901.

TABLE IV

Trends in Population Growth-Tamil Nadu and India—1901-1971

Year	TAMIL NADU		INDIA	
	Population (Millions)	Index	Population (Millions)	Index
1901	19.25	100.0	238.34	100.0
1911	20.90	108.6	252.01	105.7
1921	21.63	112.3	251.24	105.4
1931	23.47	121.9	278.87	117.0
1941	26.27	136.4	318.54	133.7
1951	30.12	156.4	360.95	151.5
1961	33.69	175.0	439.07	184.2
1971	41.20	214.0	547.95	229.8

The above table clearly reveals that upto 1951, that is before launching the family planning programme, the population of Tamil Nadu has grown faster than that of the country as a whole. In 1951, the growth index (base 1901—100) stood at 156.4 for Tamilnadu while it is 5 points less for India. Thereafter, the growth of population in the State retards as compared to the national growth, decade after decade. In the twenty-year period from 1951-71, Tamil Nadu population has grown only by 37% while the population of India has added more than half of itself in 1971 over 1951.

This is a sufficient proof of the fact that one of the reasons of this sudden turn in the growth trend of Tamilnadu population may be attributed among others to vigorous and effective family planning drive in the state by the Government. A discussion on other reasons, is however beyond the scope of this article.

Fertility is yet another cause for the population growth. A very common measure to assess the fertility is the birth rate defined as number of births per 1000 population per annum. The larger the fertility level, the more the population rise, and hence the chief objective of the family planning programme is to curtail the number of births to have an effective check on the population growth.

Right : Dr. Karan Singh, (Middle) Thavathiru Kunrakkudi Adigalar, M.L.C., and (Bottom) Thiru K. A. P. Viswanathan, a Tamil Literateur are seen addressing Family Planning Publicity Meetings.

Left : Mass appeal Drama and Folk Song Troupes are utilised for Family Planning Motivation.

The following Table V indicates the trend in estimated birth rate of Tamil Nadu and also all India.

TABLE V.

Trends in Estimated Birth Rates-Tamil Nadu and India 1921-30 to 1961-70 Birth Rate Per 1000 Population

Year 1	*Tamilnadu.* 2	*All India* 3
1921—30	42.8	46.4
1931—40	41.1	45.2
1941—50	35.8	39.9
1951—60	34.9	41.7
1961—70	31.2	39 or 38

Throughout the half century, 1921-70, the fertility level measured by birth rate in Tamilnadu is less than that of the country. The decline in the fertility performance of Tamilnadu population during this 50 year is 27% while in India it is only 17%. In the last 20 years covering the period during which the family planning programme has been in operation, the decrease in birth rate in Tamilnadu is 11% whereas the fertility level of the nation is cut by 8% only.

As a comparative study, Table VI provides the areawise details on vital rates for Southern states as also India for 1971.

TABLE VI

Area wise vital Rates-Southern States and India 1971

	RURAL			*URBAN*		
State	*Birth rate*	*Death rate*	*Growth rate*	*Birth rate*	*Death rate*	*Growth rate*
Tamilnadu	32.7	16.4	16.3	27.8	9.3	18.5
Andhra Pradesh	35.6	15.8	19.8	31.3	9.1	22.2
Karnataka	34.6	14.0	20.6	25.3	7.2	18.1
Kerala	31.3	9.1	22.2	29.6	8.4	21.2
All India	38.9	16.4	22.5	30.1	9.7	20.4

The data presented in table above are also indicative that the net natural increase in population in Rural Tamil nadu is at a low compared to other southern states and the country, but in the case of Urban areas, it is slightly higher compared to Karnataka natural growth for urban sector. But, Tamilnadu in over-all average growth by natural phenomena is, however, the least.

Impact of Family Planning on Fertility

It has been accepted that the ultimate test of the success of a family planning programme must be in terms of births averted. It has also been known that in the final analysis, changes in fertility rates are the most important criteria of success or failure of a family planning programme. However, it is exceedingly difficult to demonstrate incontrovertibly that a given programme has averted a certain number of births or has been responsible for a given decline in fertility. The programme stimulates inter action among all the components of population change. They are directed at the spacings and limitation of the number of children born to women.

It is clear from above that the ultimate measure of the programme is the indicator, number of births averted. According to a modest estimation by the Directorate of Statistics, the total number of births prevented in Tamilnadu since the beginning of the family planning programme in 1956 to 1973-74 works out to about 15 lakhs. Due to this, the average decline in the birth rate is about % per annum.

The corresponding national figure of births averted till 1972-73 is about 13 millions. In this connection, it may be mentioned that it has been estimated that Government have to spend Rs. 500/- to avert a birth.

It is but obvious that these achievements of the family planning programme in the State would definitely have had impact on the fertility change, when the birth rate (estimated) in Tamilnadu has decreased from 34.9 per thousand population in 1951-60 to 31.2 in 1961-70 a 11% decline in 20 year period.

It may be seen from above that the family planning programme is successful in reducing the fertility level of the State population. It is however, considered that in future it should be much more effdective and successful to achieve the national goal of reducing the birth rate to 25 per thousand population by 1978-79, the end of the Fifth Plan. For this, the family planning programme has to be more intensified and made more broad based in its coverage and cotent, which may be achieved by the following measures.

Tamil Nadu is the first state to realise as early as 1956 the basic importance of the family planning to national planning in controlling the population, for the benefits of planning are all eaten up by the excess population expansion. The movement gained mementum only from 1965-66 onwards, because of extensive drive.

The total number of equivalent sterilisation since inception upto 1971-72 in Tamilnadu is around 1.31 millions which is 10% of the country's achievement. The rate of acceptors per 1000 population in Tamilnadu since the beginning till October 1973 is the highest (35.5) among the Southern Region and as compared to India.

It is estimated that about 15 lakhs of births have so far been averted in Tamilnadu on account of the adoption of various family planning methods till 1973-74. The corresponding national figure is 13 millions till 1972-73.

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MULTI-FACETED ACTIVITIES OF THE TIIC IN THE INDUSTRIAL DEVELOPMENT OF TAMIL NADU AND PONDICHERRY

by
S. N. PAI,
Managing Director,
T. I. I. C., Madras.

The Tamilnadu Industrial Investment Corporation Limited incorporated under Indian Companies Act, 1949, was the first ever State Level Development Bank in the country. The Corporation now functions more or less on the lines of the other State Financial Corporations established under the State Financial Corporations Act, 1951. The Corporation assists in the development and establishment of the existing and new small and medium scale industries and its jurisdiction lies over the States of Tamilnadu and Pondicherry. It carries out its function through providing term loans to industrial concerns for the purpose of acquiring fixed assets in the shape of land, building and machinery upto a maximum limit of Rs. 30 lakhs per unit. In addition, it also provides guarantee for deferred payments over machinery upto another Rs. 30 lakhs and some underwriting facilities on merits of each case.

OPERATIONS

Over the last 26 years, the Corporation has sanctioned assistance (net effective) to the extent of Rs. 83 crores, covering 1,436 applications. Coinciding with its Silver Jubilee, there has been a spectacular increase in the Corporation's operations during the year 1974—75, . In that year it sanctioned assistance amounting to Rs. 18.25 crores (provisional) covering 485 applications as against only Rs. 5.77 crores sanctioned in the previous year in respect of 142 applications, registering a high growth rate of 216%. This had amounted to almost 30% of our total assistance sanctioned upto the previous year. Likewise, disbursements during the year were also of the high order of Rs. 8.25 crores, as against only Rs. 4.03 crores, showing a growth rate of over 100%. The outstanding assistance stood at Rs. 37.53 crores, as against Rs. 31.41 crores as at 31st March, 1974.

The assistance has been sanctioned to a wide variety of industries. Traditional industries like textiles, sugar, etc. had naturally received larger assistance in the earlier years. However, non-traditional industries like chemicals, engineering, electricals, etc. have been receiving substantial assistance in the recent years. Table I indicates the number of cases assisted by the Corporation in major industries and the financial assistance sanctioned since its inception in 1949 till 31st March, 1975.

TABLE I

S.No.	*Industry*	*No.*	*Amount Rs. in lakhs)*
1.	Textiles	275	2,250.62
2.	Food including sugar	216	955.31
3.	Chemicals	100	913.65
4.	Basic Metals	83	759.86
5.	Electrical machinery and appliances ..	64	481.14
6.	Machinery except electrical machinery ..	76	414.33
7.	Non-metalic minerals	63	399.14
8.	Transport equipment	95	396.95
9.	Paper	34	311.14
10.	Others	430	1,398.64
	Total ..	1,436	8,280.78

Development of Industrially Backward Areas

The Corporation has been playing an important role in removing the regional imbalances by assisting liberally the industrialisation of the less developed areas of the State. Out of the cumulative assistance aggregating Rs. 83 crores sanctioned upto 31—3—1975, financial assistance to the tune of about Rs. 30 crores in respect of 494 applications had gone to the less developed areas, which is inclusive of Rs. 9.13 crores in respect of 184 applications sanctioned during 1974—75, being 50% of the total sanctions in that year. Table II gives the district-wise distribution of the assistance sanctioned by the Corporation upto 31-3-1975. However, the amount of assistance sanctioned after the introduction of the Concessional Financial Scheme to units located in backward areas in the year 1971 amounts to Rs. 14.84 crores in respect of 302 applications.

Assistance to Small Scale Industries

The Corporation has been assisting in an increasing measure the small scale sector during the last few years. Upto 31—3—1975, the total assistance sanctioned had amounted to Rs. 15.84 crores covering 806 applications. There has been a notable increase in the sanctions to this sector also during

the last year. Assistance amounting to Rs. 7.97 crores in respect of 409 applications was sanctioned during the said year which exceeds the total assistance sanctioned upto the previous year.

Concessional Finance

As part of its efforts to encourage industrialisation in the backward areas, the Corporation has evolved several schemes such as help for small scale sector, technocrats, rural medical practitioners to do health service in the rural areas, transport operators, hotel industry, etc., under which concessional finance is made available. Under these schemes, not only the rate of interest is comparably less, but also longer initial grace period and extended amortisation period, depending on the merits of each case, reduced margin of security, lower contribution by the promoters to the cost of the project etc., are allowed. In the case of units located in backward areas, these concessions are in addition to the subsidy/grant/concessions offered by the State/Central Governments and their agencies.

PORTRAITS UNVEILED IN RAJAJI HALL

Dr. M. Karunanidhi, Chief Minister of Tamil Nadu, unveiled on 27th June, 1975 a galaxy of life-size multi-colour drawings of epoch-making dignitaries of Tamil Nadu in the Rajaji Hall which till then flaunted the portraits of British Dignitaries. The names of the personalities of the pictures in the following pages are as follows :—

Page 21 Periyar E. V. Ramasamy
Page 22 Thiruvalluvar
Page 23 Pandyan Nedunchezhiyan
Page 24 Bharathiyar
Page 25 Cheran Senguttuvan
Page 26 Kavichakravarthi Kambar
Page 27 Ilango Adigal
Page 28 Veerapandya Kattabomman
Page 29 V. O. Chidambaranar
Page 30 Karikal Chozhan
Page 31 Avvaiyar
Page 32 Bharathidasan

TABLE II

Name of the District/Area	No. of Loans	Amount (Rs in lakhs)
Backward		
1. North Arcot	96	674.26
2. South Arcot	59	540.85
3. Dharmapuri	41	131.83
4. Trichy (including Pudukkottai)	39	256.97
5. Thanjavur	34	161.29
6. Ramanathapuram	138	863.33
7. Madurai	70	315.67
8. Kanyakumari	10	34.06
9. Pondicherry	7	14.73
Total backward districts	494	2,992.99
Others		
10. Madras	279	804.84
11. Chingleput	295	1,657.24
12. Salem	73	873.48
13. Coimbatore	207	1,383.63
14. Nilgiris	5	46.50
15. Tirunelveli	70	457.45
16. Other States	13	64.65
Total other districts/States	942	5,287.79
Grand Total	1,436	8,280.78

Foreign Exchange Loans

A special feature of the Corporation's activities during the last two years has been the high utilisation of the Credit Line to the extent of Rs. 18 crores extended by the International Development Bank of India for availment by the various SFCs in the country. Upto 31-3-75 sanctions under this Credit Line had amounted to Rs. 3.83 crores.

Over the years, the Corporation has been trying to play an effective role in the industrial development of the States of Tamil Nadu and Pondicherry. In the process, it has also been helping to mobilise community savings, increase production and provide employment. Thus in respect of the assistance sanctioned during 1974—75 alone, the Corporation has helped diversion of resources to the extent of about Rs. 25 crores for productive purposes as the cost of the projects financed by it during this year had amounted to Rs. 43 crores. These projects, it is estimated, would produce goods and services valued about Rs. 117 crores on implementation in the course of the next three or four years and provide direct employment to about 11,000 persons. Thus TIIC functions as a pivotal organisation in the industrial development of the State.

Mycotoxin contamination constitutes a substantial problem to agriculture in terms of food and feed supplies for humans and animals. Apart from producing diseases of plants, animals and humans, mould damage accounts for nearly 45 per cent of the annual world food production. Its evil effect is more acute and alarming in tropical and subtropical climates. So prevention of mycotoxin has become imminent and imperative and research apparatus all over the world are fully engaged in a deep study of mycotoxin.

Effective Measures and Methods for the Prevention of Mycotoxins

IN AGRICULTURAL COMMODITIES

Moulds and their growth can be good or bad depending upon where they are and which types are at work. Some moulds used in the creation of food products such as cheeses and in the manufacture of antibiotics perform beneficial functions. Some produce diseases of plants, animals and humans ; and some produce toxins in food and feed products that may be harmful to animals and plants.

When moulds grow, they often produce chemicals called secondary metabolites. A secondary metabolite that is harmful is called a mycotoxin. When animals or humans are infected by these, the resulting disease is called a mycotoxocosis. These diseases occur in response to the mould-produced product. They can occur without the mould being present in the diseased person or animal.

Some of the diseases induced by mycotoxins are ergot poisoning, fescue foot, kidney toxicity, liver toxicity, neurotoxicity, pulmonary toxicity, estrogenic toxicity, vascular toxicity, skin toxicity and tumour formation.

Aflatoxin

The present concern in mycotoxins is due to an incident that occurred in England in 1960 when some 100,000 young turkeys died in the course of a few months. The cause of the outbreak was not at first recognized, and as it was thought to be a new disease, this was tentatively named turkey-X-disease. Appearance of the disease in poultry was soon related to the dietary use of groundnut meal imported from Brazil and certain African countries. Eventually it was learnt that a mould named Aspergillus flavus, grew in the groundnut meal and produced metabolites which accumulated and caused the meal to be toxic. These metabolities have since been named Aflatoxins (Aspergillus flavus toxin). Research on aflatoxins has provided a tremendous amount of valuable information about detection, measurement, removal and prevention.

Conditions that Govern Mould Growth and Mycotoxin Production

Numerous commodities, besides groundnuts, are susceptible to contamination by toxin-producing fungi under certain conditions. Cotton-seed, soybeans, corn, rice, a number of other small grains, and forage crops are among the farm commodities in which mycotoxins have been found to occur naturally or have been produced experimentally. Contamination may occur while plants are still growing in the field during harvesting, and handling, during storage and possibly even during processing. Mycotoxins, however, are not produced until the environmental conditions are favourable for growth and development of the fungus. What are these conditions :

Moisture.—Moulds can develop at moisture levels as low as 13 percent. Thus, high moisture is one of the most important conditions that influence mould growth on agricultural commodities.

Temperature.—Warm temperature also encourages moulding. Moulds grow most rapidly at temperatures of 60° to 100° F. in combination with high relative humidities. Temperatures affect not only the growth but also the metabolities formed. There appears to be optimum temperatures for various metabolites. Prolonged growth of fungi on most seeds at temperatures in the range of 30° to 55° F.may result in the formation of potent mycotoxins.

Dr. K. R. Natarajan, M.Sc.,Ph.D.,
Assistant Professor of Chemistry,
Presidency College, Madras-5.

Atmosphere. — Moulds are highly aerobic. Different types of fungi appear to have different needs for oxygen. The gases in the mould's environment influence the physiology of the mould and subsequently the synthesis of metabolites.

Substrate.—A wide variety of raw and processed foods, grain, oilseeds and forages as well as laboratory media can support the growth of moulds.

Mould itself. — The genetic capacity of the mould will also influence toxin production. Some moulds simply can not produce them. Furthermore, not all strains of a toxigenic species produce a given mycotoxin.

Other conditions favourable to mould development are damage to seeds or kernels from insects or mishandling and presence of foreign matter.

Why Moulding should be prevented ?

Mycotoxins are potent toxins and carcinogenic in a wide spectrum of biological systems. Man might respond to either acute or chronic effects of the toxins if exposure took place through contamination of dietary components. Mycotoxin contamination constitutes a substantial problem to agriculture in terms of food and feed supplies for humans and animals. Total loss of food or raw materials due to mould damage are difficult to estimate accurately. In tropical and subtropical climates, estimates of annual losses have been as great as 45% of the annual production. Mould damage constitutes a major factor in these losses which have great impact on the total world food supply.

Besides loss of agricultural commodities, there is also loss of domestic animals due to mycotoxcoses. Since mycotoxins can cause death or tumours in trout, duckling, calf, turkey, chicken, hog and cow, consuming contaminated feed stuffs, it also means significant losses in meat production.

Cancer in Humans ?

Discovery of aflatoxin in agricultural products and demonstration that this mycotoxin can induce liver cancer in several animal species has raised obvious and important questions concerning the risks to human health posed by these food—*borne toxins*. At present no direct evidence is available as to the degree of susceptibility of man to mycotoxins. However, strong circumstantial evidence exists which indicates that aflatoxin or other mycotoxins may play a role in the etiology of human liver cancer. **This has created considerable concern among many governmental and regulatory agencies.**

There are many other good reasons for mould prevention. Mould causes bad odour, makes feed less platable and nutritious for livestock, and renders some foods undesirable for human consumption. Mould causes seeds to lose viability, making them unsuitable for plainting. Furthermore, mould lowers the grade and price of farm products and may even prevent their sale. Therefore, prevention of mould growth and mycotoxins in farm commodities through careful agricultural practices should receive immediate attention.

General Practices For Preventing Mould Growth and Mycotoxins :

Preventing mycotoxins from getting into (foods and feeds involves) several distinct lines of defence.

—Prevention of mould growth
—Detection methods
—Removal of the toxin if present (*a*) chemically, (*b*) physically and (*c*) biological means.
—Identification of new possible mycotoxin threats.

The best method for mycotoxin control is prevention. A variety of prevention systems are under study: such as (*a*) prevention of fungal growth on the crop in the field ; (*b*) prevention of grain damage in the field during harvest; and (*c*) prevention of product moulding during storage, processing and further storage.

Recent research findings have revealed that the following agricultural practices reduce chances of mould damage and mycotoxin formation :

—Plant varieties tolerant or resistant to mould invasion.

—Plant sound, fungus-free viable seed.

—Supply the growing plant with adequate nutrients and water.

—Control insects and diseases.

—Harvest when the crop reaches maturity. Over-mature seeds are more readily damaged.

—Harvest crop during dry periods when moisture levels are favourable.

—Dry seed crops to safe moisture levels before transport and storage.

—Store products in dry containers at lower temperatures, or where adequate aeration is available.

—Prevent re-wetting or prolonged exposure to temperatures above acceptable levels for that commodity. Low temperature storage containers help restrict mould growth and mycotoxin contamination.

—Check regularly crops stored on the farm and in market channels to make sure that excess moisture, insects, and mould are not developing in them.

Other studies designed to discover methods for preventing mould invasion of agricultural commodities have shown that crop rotation can reduce chances of mycotoxin damage under field conditions. For instance, the mould responsible for aflatoxin (*Aspergillus flavus*) survives in most soils where susceptible crops are grown. When non-susceptible crops (grasses and vegetables) are grown, incidence of the fungus decreases in the soil. Soils previously free of *Aspergillus flavus* can become infested after two successive years of a susceptible crop, such as groundnuts. Soils with higher organic matter contents have a greater variety of micro-organisms, many of which tend to restrict *Aspergillus flavus* growth.

Looking Ahead

These are some basic approaches to mould prevention. More effort is needed to develop specific prevention procedures for this biological source of pollution to our nation's food supply. An expanded educational programme may be necessary with the specific objective of pointing out the potential dangers associated with eating of mouldy or mycotoxin contaminated foods

CAREER OPPORTUNITIES FOR WOMEN IN INDIA

Woman is indeed a pivot around whom the family, society, nay, the whole humanity moves. "Social progress can be measured with precision by the social position of the female sex" said Karl Marx. The desirability of giving important status to the women in society has often been expressed, though this was denied in actual life.

Our demographic statistics prove that working women in India have a lower economic status than men. One third of India's population is employed. Out of this 184 million, men account for 149 million and women are 34 million. In other words, for the 52.5% of the male working population only 13.8% of women are employed. Out of the 34 million employed, 50.5% are agricultural workers and 29.6 are cultivators. Though the literacy rate among women has gone up from 7.9% in 1951 to 18.7% in 1971 the literary rate of men is 29.51% as against 18.44% of women. As per 1971 statistics there were about 3 lakh women graduates in arts and humanities, 82,000 science graduates, 4,000 commerce graduates, 400 agricultural graduates, 16,000 doctors, 3,500 engineers. This indicates that more than 80% women are employed in agriculture.

Some of the reasons attributed to lesser participation of women in various fields of employment are their

(*a*) physical disability or biological limitations,

(*b*) lack of education,

(*c*) economic dependence,

(*d*) lack of ambition—conditioned by tradition,

(*e*) adverse effects on family life,

(*f*) discrimination by men and

(*g*) social convention and cultural influences being unfavourable to women's active participation outside family life.

By

Selvi THOYAJAKSHI DEVENDRA

In this man-dominated society in which we are living, the women's contribution to productive work has been reduced to a helpers work. Throughout the ages, it is only a microscopic fraction of women that can be asserted to have not participated in productive work. They always belonged to the higher socio-economic strata of society and these women are prevented by their men for reasons of social prestige and vanity from engaging in productive work. In the modern industrial society, despite the physical limitations women are working on machines, services and profession. Their labour (domestic and in the various fields) contributes a substantial part of the wealth produced in every nation.

Why Lag in Women's Education ?

General apathy to the education of girls still prevails in major parts of India. The National Committee on Women's Education attributes the following reasons:

(*a*) Social prejudices and orthodoxy mainly in rural areas ;

(*b*) Apathy to the education of the girls as of no special use to them in life ;

(*c*) Home conditions which requires the young girls of 6 to 11 years looking after younger children of the family ; and

(*d*) General poverty resulting in inability to give the school-age girls of the family decent clothing and adequate nourishment.

Even in the 20th century, girls' education is considered as of secondary importance to that of boys of the family. A boy's mind is trained from the early years to look forward to a job, or a career seriously and accept the responsibility of feeding, rearing and protecting the family. On the other hand, ideas of keeping the house, looking after the husband and rearing the children are drilled into the girls minds. Women have to assume a dynamic role in the changing context of time and locale. Lack of education and economic dependence on the part of majority of women goes a long way in making them play a passive and subordinate. role in the society. It is, therefore, essential to educate the public opinion and give equal opportunities of education to women to eradicate the practices which are based on the idea of inferiority of women.

Protective Laws

There are a number of laws and International Labour Organisations Conventions to preserve and protect the health of women employees and the security of employment ; for women have double role to perform, one at and home and the other at the place of work.

Statutory provisions protecting women workers in India are :

(1) The Factories Act, 1948 provides that no female worker will be required to lift or carry unaided any weight beyond 65 pounds.

Really speaking this limit is excessive. In western countries these limits vary from 20 to 45 pounds.

(2) **Creches** : The enactments like Factories Act, Beedi and Cigar Workers Act and Plantation Labour Act provide for maintenance of creches with suitable ventilation and attendant nurs-

ing and supply of milk to infants of the working mothers.

(3) **Maternity benefits** : The Maternity Benefits Act, 1961 and the Employees' State Insurance Act, 1948 provide for maternity benefits to the working women in the form of authorised leave of absence with wages to the extent of 12 weeks. The later Act also provides for medical benefits, hospitalisation, etc. These benefits cover also cases of premature deliveries and miscarriages. Further, this Act also prohibits discharge and dismissal during the period of confinement.

(4) **The Provident Fund and Gratuity Acts** : These two retiral benefit measures provide that a male worker can nominate his wife and children only for the purpose of receiving the amount after his death. These two Acts further provide that in case of married female worker, she is enable to exclude her husband, or his parents from the nomination for receiving the amounts after her death.

(5) **Night Shift** : The Factories Act, 1948, the Mines Act 1952 and the Plantation Labour Act, 1951, the Beedi and Cigar Workers Act and Shops and Establishments Act, prohibit night-shift working for women. These provisions do not apply to nurses etc. Further, some relaxation in this prohibitory rule is possible in some cases to enable the female worker to work upto 10 p.m. but not beyond that.

(6) **Underground Work** : The Mines Act, 1952 prohibits underground work by the women labour.

Adverse Effect

Effective steps to implement the above have an adverse effect on employment opportunities to women on the grounds that it not only dislocates the work at work place but also their services cost more due to these restrictions. In the interest of society and the well-being of the posterity, women should be given adequate protection, but not protection which inhibits or stabilises them further.

Even today there is a wide gap in the opportunities and facilities available to women as compared to men. In 73—74 for every 100 boys there were 62 girls in the primary school, 43 in middle schools and 31 at the College and University level. The implementation of the constitutional and legal provisions for women is not yet fully effective in many fields. There are still a host of customs, social conventions, regularities and practices that are discriminatory against women. In fact, a vast field lies before this nation to ensure justice and reduced the disparities in the opportunities and facilities available to women and make them equal partners in educational, economic, employment and social life of the society.

A view of the Seminar, Thirumathi Vasumathi Ramaswami (seated on the dais) gave a refreshingly new outlook at the Seminar

SUBTLER PROBLEMS OF WORKING WOMEN

by

Thirumathi Y. G. Parthasarathy

While the problems of working women are discussed, it has to be admitted that the married working woman has more social problems than the unmarried working woman. The middle class and upper middle class women, due to economic pressure, are finding it necessary to work to augment the family income. But women of poorer classes have been working from time immemoril in India as agricultural labourers, factory workers, domestic servants, masonary workers, conservancy workers and so on.

Unfortunately though their social problems have been as great as those of the middle-class, if not worse, few of us have ever thought to discuss or solve them. In the International Women's Year, we must not forget the millions of such silent suffering silent women who have stood shoulder to shoulder without men folk and not only worked in the fields, in the factories and in the homes to earn wages, but have continued to look after their children, their own homes, bear children and bring them up too.

These women have put up with lot of hardships living in dire poverty and misery, since most of the men take advantage of their earning capacity and have let the burden entirely on their shoulders. Very soon, these men have taken to drinking and have fallen sick, so much so, these working women have had an Herculian task to maintain even the semblance of a home. We should be ever grateful to the Government for having brought in prohibition, family welfare schemes, family planning and sick insurance schemes, which have been a real boon to these women.

On the other hand, the middle class and upper middle-class working women, as most of them have a sprinkling of education, have had subtler social problems to face, unlike the working women of the labour class. These women have had more of emotional problems than physical problems, though, of course, they too not only contribute financially to the family budget, but also have to run their homes, bear children and bring them up too. Of course men of the middle class do not leave the entire burden of earning to the women, and certainly may not be the drones who take advantage of these women. They are more responsible and indulge in fewer vices which usually drain the resources in the labourers' homes. But these men are very conscious of their status as the head of the household, and expect these working women in their homes to contribute their entire income to the household without claiming any privileges and in fact take pleasure in humiliating them, since these men feel insecure. They boss over these women and hurt their feelings with sharp inuendos and will not lift their little finger to help them in their household chores. So much so, the working women of the middle class not only work in office but also to cook, wash, maintain the house, educate their children, do all the purchasing for the house and attend to her husband's personal needs, both physical and otherwise with humility and even a feeling of guilt, for leaving the house when she has to go to work. It is high time that the problems, especially the social problems of the working women, are thrashed out in such a way that society becomes aware of them and begins to recognise and give the due respect and status that working women richly deserves.

Better than Men

It cannot be denied that a woman at work is much more conscintious, sincere, incorruptible, more responsible and scrupulous than men are. Where the women's gentle touch adds to the grace and beauty of living the working woman adds lustre. Women as teachers, doctors nurses, lawyers, clerks, receptionists, officers, musicians, dancers, politicians, pilots, engineers etc., are very efficient and successful in their chosen fields of nation-building. More and more employers must come forward to employ women. In fact the All India Women Conference at its recent half-yearly session at Kodaikanal, emphasised that 50% of the employment opportunity in every field should be reserved for women if the nation wants to achieve phenomenal progress. **But more than all that, working women, whether from the poorer classes or the middle-classes, should and must get the recognition, respect that they deserve, not only from society, but from their homes too, especially from the other women, who do not go to work.** The tendency today is to criticise and look down upon the working women, as if going to work were a great crime, and women themselves criticise these women of neglecting their houses and children and husbands. In fact, the husband also develop an inferiority complex ,becomes jealous of his wife, suspects her fidelity and even deserts her to the extent of carrying on, or at least flirting with other women. This is the kind of gratitude that she gets, for having tried to contribute to the family income, and raise their status in her selfless, self–effcaing efforts. This injustice done to the working women must go.

RESOLUTIONS PASSED AT SEMINAR ON SOCIAL PROBLEMS OF WORKING WOMEN

Madras was the venue recently of a Seminar on Social Problems of Working Women. Thiru. N. Ramanathan, Regional Director of Workers' Education, welcoming the distinguished guests and the participants explained the Workers' Education Programme and said that this Seminar was to mark the significance of International Women's Year and to promote a greater awareness among working women of the unique problems confronting them and to evolve suitable measures to overcome them.

Thirumathi Y.G. Parthasarathy, in her presidential address, observed that the problems faced by the married women were still complex. Though they opted for work mainly out of economic necessity, they yet suffered a guilt complex of neglecting their homes. Prejudices emanating from the society and family towards the working women tended to aggravate their problems further. In her opinion, more prominence should be given to women in administration to mitigate the evil of corruption and abuse of power. She suggested reservation of 50% of job in all walks of life for women.

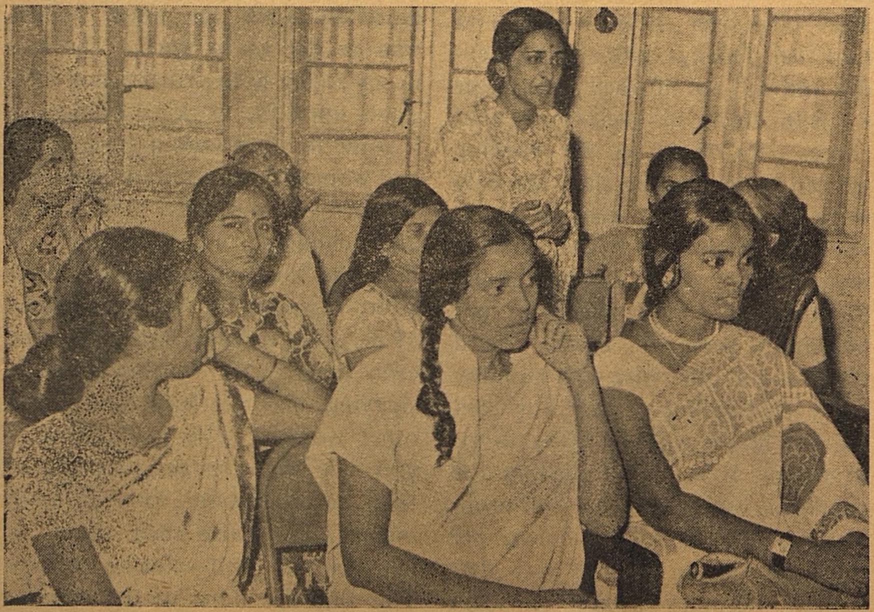
Selvi M. S. Ramesh, I.A.S., Collector of Madras, inaugurating the seminar wanted the working women not to be apologetic about their problems but face them with intelligence and determination taking them up as challenges.

Women's potentialities should be harnessed to the betterment of the society as a whole. They have to play a greater and positive role even outside their homes.

Selvi Thoyajakshi Devendra, proposing a vote of thanks, said that the desirability of giving important status to the women in society has been often expressed, though denied in actual life. Change of attitude and readjustment on the part of society is needed. Educating the public opinion to eradicate the prejudices based on the idea of the inferiority of women was essential.

Mythili Shivaram spoke on the necessity of separate trade unions for working women. She advocated active participation from working women of middle class. She observed there was a reduction in job opportunities. In the year 1961 women working force was 27%. Today it stands at 19%. In agricultural employment the disparity in wage scales still persists.

Dr. Vijayalakshmi pointed out that even in Western countries men alone were termed as bread winners. Matrimony could not stand in the way of job security for women. The problems of working women being unique she made a strong plea for the formation of a separate trade union. The I.L.O. conventions 100 and 111 stresses equal pay for equal work and discrimination in employment and occupation till today are followed more in breach than in observance.



Participants in the Seminar

Selvi Bhargavi Devendra stated the working women were faced with environmental, inter-personal and psychological problems. While psychological problems could be solved by counselling and guidance, interpersonal problems necessitated a change in the attitude of the society. Environmental problems could be tackled through public and voluntary social welfare agencies. The role of Government as the arbitar was greater.

Dr. Russia addressed the participants on problems of Family Welfare. Child bearing and child rearing are peculiar to females species which call for understanding and sympathy of their partners. Child care is the specialised art and she stressed the need for organising creches for the children of working women in the offices.

Valedictory address

Thirumathi Vasumathy Ramaswamy, winding up the Seminar, averred that the roles of working women and housewives were not conflicting. It should be integrated. The one lesson that India could teach the World in the fabric of family life is still maintained. She made a fervent appeal to working women to maintain the tradition and not blindly follow the west in their outlook.

Resolutions of the Seminar :

1. The problems of working women being unique the Seminar recommended the formation of a separate trade union to protect and create new rights.
2. Working women should resist dowry demanding matrimonial alliances.
3. Seminar recommended the enactment of common civil code.
4. Severe legislation should be enacted to curb the 'new wave' tendencies in novels advertising media, films and magazines.
5. Women should boycott the new tendencies and withdraw their patronage to the above mentioned items.

ROAD RULES FOR PEDESTRIANS

What with the rapid rise in population and vehicular transport and the growing intolerance of constraints of any kind, traffic accidents claim far too many casualties of late. How many of the maimed and the halt owe their fate to mishaps on the road ! It is a fallacy to assume that all road accidents are caused only by mechanical defects of the vehicle or rash and negligent driving. Not a few of them are due to the carelessness, thoughtlessness, selfishness, haste, excessive love of adventure or a misdirected sense of romance on the part of the pedestrian, or lack of road sense. Hence the need for educating the pedestrian on all aspects of road use, including his rights and responsibilities on the highway and road safety. The pedestrian must be trained to form proper habits, so that he may automatically do the right thing and refrain from doing the wrong thing while on the road.

Any person afoot on a highway is a pedestrian. You are nonetheless a pedestrian if you lead a cycle or push a perambulator along the road. You have every right to make use of the road as a line of communication between places. But this right is subject to certain limitations.

According to Law, your life is not your exclusive property and you cannot play ducks and drakes with it. You have no right to expose yourself to danger while on the road, saying, 'After all it is my funeral.' Secondly others also share the right of way over public thoroughfares. Thus you have absolutely no right to cause obstruction to traffic.

These limitations necessitate traffic regulations. Pedestrians are enjoined by law to conform to certain regulations. For instance, in the case of roads where footpaths have been provided, you have to walk along those pavements. Where there are no such footways, you have to walk along the edge and not the middle of the road. Otherwise you are liable to be charged by the police for jay-walking. You have to obey the directions given by traffic policemen as well as those conveyed by the traffic light signals. No pedestrian shall cross any street except at the demarcated pedestrian crossings where they exist. No foot-passenger shall remain on any pedestrian crossing for more time than is reasonably necessary for the purpose of crossing it. At those pedestrian crossings which are controlled by traffic light signals, pedestrian shall obey those signals.

Besides these penal restrictions, you must also excerise self-imposed restraint and circumspection in the interests of yourselves and other road users.

For a population of 28 lakhs and with 80 square kilometres, Madras had one lakh vehicles, including 80,000 registered in the city. There were two lakhs of two-wheeled vehicles. The main problem in the city was the existence of mixed traffic and it was not far off when hand-cart pulling would be stopped and the men rehabilitated.

As there was awareness among the people to improve the traffic condition, the Police feel, the number of accidents in the City had come down from 7,748 cases in 1973 to 7,244 in 1974. Of these, 10 per cent was contributed by cyclists and 27 per cent by pedestrians. The traffic division had a strength of 900 men for regulating and enforcing traffic rules. Of the 250 fatal cases in 1974, in 92 cases, the Pallavan Transport Corporation was involved. Of the 92 cases. 25 deaths could have been avoided by prevention of footboard travel. There is need for periodical checking of the eyesight of drivers after the age of 40. The Police also laid traps for over-speeding and conducted regular propaganda among road-users. The starting of a Regional Institute of Traffic for training Police Officers and men is under consideration.

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" Safety First " should invariably be your motto. You cannot always take it for granted that other on the road will obey the law. It is up to you to ensure your own safety even if the other man breaks road rules.

" More haste, less speed ". Very often you say to yourselves, ' Let me rush in before that car arrives.' You are tempted to run through Railway Level Crossings when they are closed. Are you going to risk your life in trying to save a few seconds ?

While walking, keep your senses always alert, especially your eyes and ears, with all attention to the traffic around. Absent-mindedness may lead to accidents. Attractive cinema posters pose a traffic hazard. If you indulge in talking while on transit, do not get so engrossed in the conversation as to ignore either your own safety or the convenience of others. Never walk turning neck backwards or bending down your head, even for a short distance. The golden rule is to watch and anticipate the movements of every person, vehicle and animal near you and plan your motion accordingly. Let nothing else distract your attention.

While crossing a road, you have to see to your right while on the first half of the width of the road, and to your left while on the second half.

You have to be specially careful at certain danger spots like places which are particularly crowded, blind corners and bends, road junctions, narrow segments of roads, and places where stray animals are at large or where a vehicle has been parked, especially in roads which are not broad enough. You must avoid getting caught in places where one vehicle is likely to overtake or pass another as well as those where in an effort to avoid Scylla, you are likely to court Charybdis. Stop, look, listen and then proceed at these danger spots.

Similarly you have to be careful when you go out after a rain, as every one will naturally prefer the dry portions of the road.

Coming to the interests of others, we must avoid needless inconvenience, annoyance or danger to the other road-users.

It will cause inconvenience to others if you walk three or more abreast, halt at the centre of the road and talk to friends. If you want to halt and talk to any one, both of you have to move to place on the edge of the road, where you will be safe and will be causing the least hindrance to others, avoiding danger spots, and stand there, not abreast across the road, but along its length. While talking, remember that rash and violent gesticulations may disturb others. Your fingers may impinge on somebody's eyeballs or throw his spectacles down. While standing or walking on roads, it is a hindrance to others if you put your fingers on the hip, making your elbow protrude sideways.

While walking through sand, you will not kick the sand about if you have some concern for the other man's eyes. Likewise, while wading through water, you will soil the clothes of others if you splash it.

Sauntering along in a leisurely fashion is another source of annoyance to your fellow-travellers. Running about or playing or fighting in the street will annoy others.

When you take things with you, you have to see that they cause no hindrance, obstruction or harm to the other road-users. For instance, if you happen to carry articles like paint or tar, see that passers-by do not get smeared.

If you wave your wet towel about, water from it may splash on others or the end of the towel may hurt their eyes. Dangerous articles like crowbars may harm others if carelessly bandied about. If any animal happens to be on your way, it may jump on the next person if you scare it. Nor should you amuse yourselves throwing stones at each other on roads. Your stones may land on unexpected heads.

Besides these duties, there are certain Road Manners. ' The other man first ' should be your motto as far as possible. For instance, if a cyclist or pedestrian is undecided as to the direction in which to cross you and starts wavering, the best think is for you to stop and let him pass. In such instances, it is good manners to give in.

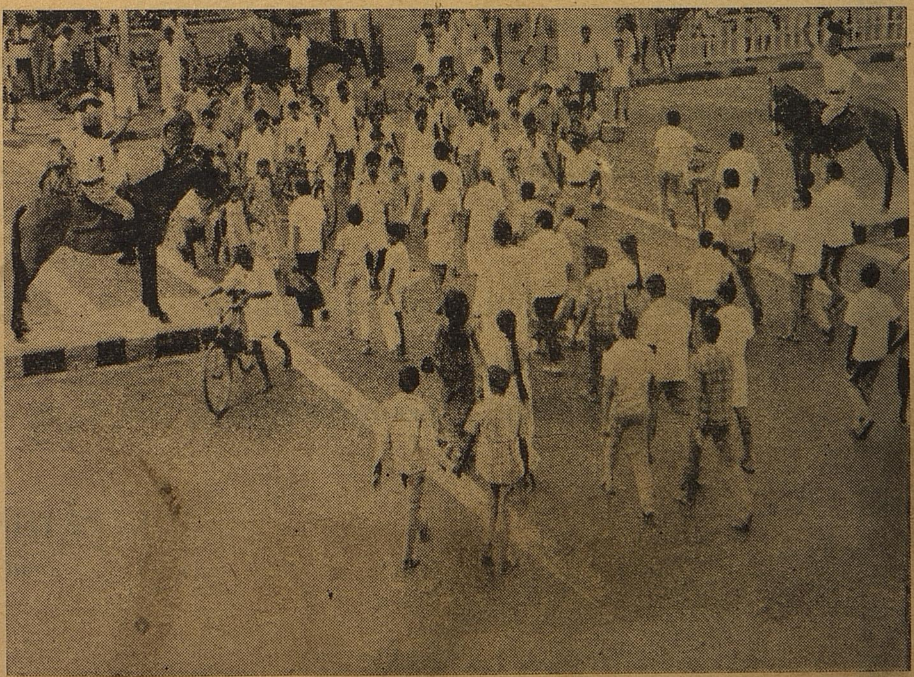
Always help the old, the infirm and tiny tots to cross streets and negotiate other traffic difficulties.

When you see others carrying things which might spill or break, like glassware, oil or milk, you should take special pains to see that they do not spill, fall down or break.

Avoid spitting. If you have to blow your nose while on the road, you have to do it very carefully, remembering that no one else would like to have a spray therefrom.

To sum up, you have to keep in mind that ' the best safety device is a careful man '. Be it also remembered that there are others as well using the road in their own right. It is the duty of pedestrians to make road travel safe and pleasant for all.

By
S. VASUDEVAN,
M.A., M.Ed., M.R.S.T. (London)



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Loan outstanding against Primary House Mortgage Societies and Building Societies.	—	Rs. 20,80,41,326

Long term loans for construction of new houses, additions and improvements etc., repayable in twenty years are granted to individuals through affiliated societies. Please contact nearby Primary Housing or Building Society for information.

Fixed Deposits also accepted.

(Repayable of Principal and Interest payment guaranteed by Government of Tamil Nadu.)

		MAXIMUM INDIVIDUAL LOAN
1. For Construction of new houses	—	Rs. 30,000
2. —do— (Through Rural Housing Societies)	—	Rs. 10,000

P. K. PATHMANATHAN, B.A., H.D.C.,
Joint Registrar / Secretary.

Frequent Small-dose Meals can save men from Obesity

RESEARCH RESULTS INDICATE NEED FOR EMPHASIS ON "WHEN" TO EAT RATHER THAN ON "WHAT" TO EAT

The incidence of obesity is alarming in the affluent societies. In the United States, this has been referred to as the number one health enemy. From this, one may easily speculate that the abundance of food is reflected in the abundance of body fat. However, this postulate does not hold if we look at the animal kingdom. We do not find a " fat " lamb in the grazing herd. From dawn to dusk, cows are seldom tired of eating ; yet no one stands out as obese. No seagull pays for his gluttony with excess weight. In fact, the wild animals spend a great deal of time on eating but hardly they get fat. As such, one may ask : Is obesity something unique in man ?

Obesity appears to be a health problem that rarely afflicts other forms of life except man and his pets. Some similarity was, therefore, sought for in the eating behaviour of these two which might account for their common anomaly. It is well known that, while other animals eat *ad libitum* (at will), man and his domesticated pets observe meal times. It has been found that the relation between meal eating and obesity is not casual but direct. In other words, how frequently each day one eats, that is, the periodicity of eating, may have significant influence upon laying down of fat in the body. We would examine here the evidences that support this contention and the feasibility of their application in the control of obesity.

In classical nutrition, various factors have been described responsible for changes in body weight. These include the calorie intake, composition of the diet, growth rate, sex, physical activity and the previous nutritional status of the individual. From recent investigations it is now certain that a new factor should be included in this list, namely meal frequency. Such studies stemmed from the observation that the metabolic disposal of the total diet, divided into a few meals spaced apart, is different from that of many small sized meals spaced, close to one another For example one can easily contrast. the metabolic adjustments that must occur for the utilisation of 2,000 calories ingested in loads of 200, 400 and 1,400 at five hour intervals with the requirements for the disposition of the same 2,000 calories consumed in loads of 200 at one hour intervals. It is obvious that the adaptive differences in the metabolic set-up must be present when organisms are compared under these circumstances.

Studies on animal

During the period 1959 to 1963, Clarence Cohn of the Michael Reese Hospital in Chicago (U.S.A.) demonstrated through various experiments that the periodicity of eating influences the efficiency of ene;gy utilisation in the laboratory rat. He fed one group of rats at meal times and another group he let eat at will (nibblers). The amounts of food given to both groups were equal, the only difference being that one was given its total daily ration by stomach tube at the time twice daily. After 41 days he weighed the rats and found that weight gain was the same in all. However, the chemical examination of their carcass revealed a striking difference between the groups. The force-fed animals had invariably more fat in their body than the *ad libitum* fed controls. Cohn's observation suggested that the animals fed diet at meals somehow developed a certain efficiency in retaining ingested energy in the form of fat in their adipose tissue.

Gilbert A. Leveille and his associates in the State University of Michigan at East Lansing (U.S.A.) repeated in the late sixties the Cohn studies with a few modifications. In one study, they allowed the test rats to consume as much as food desired. However, they restricted the period of access to food from 8 a.m. to 10 a.m. This was their meal time. These animals were compared to nibblers for whom the same quantity of food was continuously available. After a few weeks it was noted that the meal-fed rats had consumed approximately 15 per cent less than the controls. Interestingly, despite their having eaten less, the meal-fed animals had gained weight as fast as the nibblers. These meal-ingested rats responded in the same way as Cohn's force-fed rats in that they appeared to be more efficient in retaining energy.

In the experiments of Leveille, anatomical changes were also apparent in the animals forced to adopt the routine meals. Both the stomach and small intestine became larger in such animals. This is a stress response to deal with a greater load of food to be taken at stated times for sustenance. In the rat, for example the small intestine increased in size by approximately 40 per cent. Similar increases have been observed in chicks and pigs when they are meal fed. Whether man adapts to large, infrequent meals in this way is not known. But in view of the general nature of such adaptive responses in all other species studied, it is likely that man's stomach and intestine would show hypertrophy in time.

Although in the above studies the rate of absorption of food-stuff per unit of intestine did not change as a consequence of meal eating, the 40 per cent increase in the size of the small intestine implies that, in the meal-fed rats, the rate of absorption of food-stuff will be 40 per cent higher. In fact, this has been found to be the case in glucose absorption.

Fixed meals lead to fat

Amongst the three proximate principles of our food, fat represents the most compact form of available energy. While one gram of carbohydrate or protein can supply only

4 calories, the same amount of fat gives 9 calories when burnt in the body. Therefore, the storage of energy in the form of fat is a convenience for the body when the body is required to do so. To ensure efficient storage of the ingested energy, an adaptive response has been documented in the animals living on meals, namely, enhanced lipogenesis. It has been shown by several investigators that the adipose tissue, where most of the storage fat is deposited, attains a higher capacity for fatty acid synthesis in the fasted meal-fed rats than in the nibbling counterpart and this capacity further increases upon meal eating. This has been tested in the laboratory by studying the rate of incorporation of radioactive glucose into radioactive fatty acids by isolated adipose tissues.

The augmented lipogenic potential consequent upon mealfeeding has also been demonstrated through the study of the respiratory quotient (R.Q. — Volume of CO2 produced/ Volume of O2 consumed of the animals. As a part of the compensatory mechanism to cope with infrequent large meals, animals are expected to develop an increased capacity to store ingested energy during the meal period and to recall the stored energy during the post-absorptive, between meal period. For example, in animals on a high carbohydrate diet, one would expect that conversion of carbohydrate to fat would be occurring during and immediately after the meal period, and that during the post absorptive period fat would be recalled to provide energy for the organisms. This has been verified in the rat by studying the R.Q. of the animals during a 24 hour period. In control nibbling animals, the R.Q. was approximately 0.85 throughout the period indicating oxidation of carbohydrate and fat, as would be expected if the rat were in the absorptive phase throughout. However, in the animal given a single meal, the R.Q. was in excess of 1.0 for approximately 8 hours following the initiation of the meal. This R.Q. above unity is indicative of active laying down of fat, showing that during this period the animal was indulging in lipogenesis by converting carbohydrate to fat. In the next 6 hours when oxidation of carbohydrate and fat was taking place, the R.Q. fell to 0.85. This suggests that the stored energy — in this case, glycogen and fat — was being utilised. During the subsequent 10 hours prior to the next meal, the R.Q. fell further to 0.73, indicative of the oxidation of fat. In other words, when an animal is given a single large meal during a 24 hour period, energy is stored in the form of fat during the absorptive period and fat is recalled to act as a source of energy for support of the metabolic processes in the post-absorptive period between meals.

Extensive studies have revealed that approximately 70 per cent of the ingested energy is stored during the absorptive period following the initiation of a meal in the rat — 20 per cent as glycogen and 50 per cent as fat. The remaining 30 per cent of the ingested energy serves to support the metabolic processes during the absorptive period.

Muscle is the major site of glycogen storage in both meal-fed and *adlibitum* fed animals, accounting for over 90 per cent. Most of the remainder is stored in the liver in the case of the nibbling animals and, surprisingly, in adipose tissue in the case of the meal-fed rats. Fifty per cent of the ingested energy stored in the form of lipid is synthesised and deposited in adipose tissue.

In other species such as chicks and man liver is the major site of fatty acid synthesis. Probably in these species, carbohydrate will be transformed into lipid in the liver and lipid would be transported to the adipose tissue for storage. Further investigations can reveal if this is indeed the case.

Organic Inefficiency

The discussion has so far emphasised the increase in body fat associated with a decrease in the frequency of food intake. An important question that remains to be resolved is : Apart from carbohydrate, is any other nutrient of the diet channelised to the pathway of fat synthesis in the meal-fed animals? Protein, being the most expensive nutrient of our diet, is of spceial concern. Although, this aspect has not been adequately looked into, several lines of evidence obtained in the early sixties by Clarence Cohn of the Michael Reese Hospital in Chicago (U.S.A.) indicate that the utilisation of the dietary protein is less efficient in meal-fed rats. For example, he observed that in such rats the urinary excretion of non-protein nitrogen (N.P.N.) and several enzymes of the urea cycle involved in the degradation of amino acids to urea are increased as compared to the nibbling controls. Studies in the sheep, steer and man have shown these species to react to feeding frequency with respect to urinary nitrogen excretion, in a similar manner. Thus, it appears that the wasteful breakdown of the dietary proteins and amino acids is increased due to meal observance — the nitrogen part being excreted in the urine instead of being utilised in the synthesis of body proteins and presumably, the carbon part contributes to fat synthesis. This is indeed not economic to the organism.

Human studies

There have been relatively few studies on the periodicity of eating in human subjects. Special mention will be made here of the report published in 1964 by Paul Fabry of the Institute of Human Nutrition in Prague (Czechoslovakia). His report implies that meal eating — or at least the intake of relatively few large meals — is undesirable for man. He studied a group of elderly men who had been following, for sometime prior to the study, a variety of meal frequencies ranging from 3 to 5 or more per day. His data on the incidence of overweight, hypercholesterolemia and abnormal glucose tolerance show that, lower the number of daily meals, higher is the predisposition to these three conditions. These results are consistent with the observations made in controlled studies in which human volunteers were asked to consume their diet divided into fixed number of meal (1 to 6). For example, C.M. Young et al. of the Cornell University, Ithaca (U.S.A.) found in 1971 that infrequent intake of large meals predisposes humans to obesity, elevates blood cholesterol and impairs glucose tolerance. An inverse relation between meal frequency and blood lipid level in man has been substantiated by other investigators as well. Experimentally, it has also been established that a reduced glucose tolerance manifests in man when all the food is taken in a single large daily meal.

These effects are, in general, not unlike those observed in the rat except that in the rat meal feeding does not affect the glucose tolerance. The human data obtained so far are also indicative of the enhanced lipogenesis incidental to meal eating.

Enzymatic adaptation

When nibbling rats are switched rate of fatty acid synthesis is attained within approximately nine days on the start of the meal routine. If this relatively short period of time, the rat's adipose tissue increases its ability to convert carbohydrate to fat several fold. The biochemical basis of this adaptation is obscure. It is interesting that in the meal-adapted rats activities of some key enzymes involved in the conversion of glucose to fatty acids and triglycerides are increased in the adipose tissue. These include : hexokinase and pyruvate kinase (glucose pyruvate), citrate Iyase, also called citrate cleavage enzyme (pyruvate acetyl coenzyme A), and acetyl coenzyme A carboxylase, fatty acid synthetase and glycerophosphate dehydrogenase (acetyl coenzyme A fatty acid and triglycerides).

It is known that fifty per cent of the reducing equivalents necessary for lipogenesis are derived from the pentose pathway. The two key dehydrogenase enzymes involved in this pathway are glucose-6-phosphate and 6-phosphogluconate dehydrogenases. The activities of these two enzymes also increase with meal feeding.

The remainder of the reducing equivalents are now believed to be derived from the " malate trans-dehydrogenase sequence " involving three enzymes : malic enzyme, lamate dehydrogenase andpyruvate carboxylase. The activity of the first and the last enzymes of this sequence increase significantly in the adipose tissue of the meal-adapted rats.

The question then arises : Are these enzyme adaptations responsible for the preferential fat deposition in the meal-fed state ? It has been found that in the adaptation to meal feeding enzyme activities in animals increase at a slower rate than does the rate of lipogenesis. Thus, it is not the enzyme activities which are responsible for the increase in fatty acid synthesis ; rather the step-up carbohydrate flux to fatty acids causes the enzymes involved to increase their activities.

The involvement of the endocrines in fat storage of the meal-ingested rats has been investigated. Evidence savailable so far indicate that thyroid, gonads, adrenals and pituitary cannot be directly implicated in this respect, since removal of these glands do not modify the course of events of meal-adherence.

' Deadaptation ' means reversal of meal-fed animals to natural *ad libitum* eating. The rate at which the tissue " deadapt "—that is, return to normal levels of lipogenicpotential consequent upon return to the nibbling regimen from meals — is a slower process. As mentioned earlier, while the attainment of the maximum lipogenic capacity in the rats is reached within about nine days of the start of the meal routine, it takes approximately six weeks for fatty acid synthesis to come down to normal levels when meals are withdrawn and replaced by eating at will. Therefore, the adaptive increase in fatty acid synthesis is about four times as fast as the return to normal. This is important in explaining why human weight-reducing regimes fail to produce long-term weight loss. During the period when a meal-eating rat is returned to *ad libitum* eating and prior to the return of the lipogenic process to normal, excessive amounts of fat are deposited. This food intake pattern is similar to that of a person during and immediately following a self-imposed reducing regimen. Generally, a person ' on diet ' reduces calorie intake at the morning and noon meals with essentially no reduction during the evening meal. In effect, he is eating one meal a day. Increased capacity for lipogenesis would occur as in the laboratory rat, but since the total calorie intake is reduced the individual indeed loses weight. After some time on this regimen, the desired weight may be attained — but the individual is now adapted for very rapid fat synthesis. Being pleased with the desired weight loss, when he resumes normal food taking, there is a rapid conversion of ingested energy to fat and probably a return to the original weight, if not more. This is the so-called obesity cycle, often referred to as the ' yo-yo syndrome " of weight reduction. It is common knowledge among the physicians that one is seldom able to prevent the recurrence of obesity.

Article by :

Dr. B. Pal,

Research Associate in Dept. of Medicine, University of Rochester, U.S.A. reproduced from " **Science Reporter** ".

Physicians and nutritionists concerned with the increasing problem of human obesity might do well to take a hard look at the way the animals eat. Animals mostly eat when they like and they do not appear " fat ". But when animals are provided with food at specified times, this imposes a stress which requires special adaptation for survival. The adaptation ensures that energy is available between meals. This is achieved by stimulated synthesis of fat, the most concentrated form of storage energy. What happens in animals most probably also happens in man under the same circumstances. Thus, it appears that by adhering to meal times man has become the architect of his own obesity. Obesity is not a special feature of human metabolism since it can be induced in animals as well —by dietary manipulations.

Perhaps, man has inherited from his ancestor a predisposition to obesity. A successful hunt could satisfy the needs of an early man for a short time, but often his stores of salted and dried foods gave out and he faced a period of enforced fasting. His survival depended on his ability to adapt metabolically to irregular eating. This adaptation undoubtedly took the form of fat synthesis and storage against future energy demands. The development of agriculture and more recently of food technology has given modern man a relatively steady food supply, and eating can follow a predictable pattern ; but the potential for fat storage is still with us, although we hardly call upon it to support life.

As the animal evidences suggest, eating at will is the best preventive against obesity. However, we would not go that far so as to advise a civilised man to eat all day long. Herein lies the importance of dividing our diet in small frequent meals. Nutritious snacks are highly indicated in the treatment of obesity. Snacking will help as the body will not sense the no-food state between meals as the signal for lipogenesis. So long we would pay attention only to what to eat. Recent studies indicate that when to eat may be equally important.

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EMPLOYMENT SITUATION IN TAMIL NADU

During The Month of May '75

The general employment situation in Tamil Nadu during the month of May, 1975 showed an upward trend in Exchange activities in the cases of the number of vacancies notified, number of submissions made and the number of employers using the Exchanges, while a downward trend was noticed in vacancies filled. The increase in the number of vacancies notified is due to the receipt of bulk vacancies from the Pallavan Transport Corporation for the posts of Conductors and Drivers, from the Government Press for the posts of Compositors and from the Divisional Fire Officer, Cuddalore for the posts of Clerks. The increase in registration is due to the announcement of results. The increase in the Live Register is due to the extension of renewal period from three months to six months with effect from February '75. In terms of percentage variation, employers who used Employment Exchanges increased by (+) 8%, Registration by (+)4%,, vacancies notified by (+) 3.9% and Live Register by (+) 2.8% when compared to the previous month, the placement, however decreased by 1.8%

Compared with the corresponding month of the previous year, the Live Register increased by 1.6%, while decrease is notified in the employers who used Employment Exchanges by (—) 22.1%, vacancies notified by (—) 18.7% and Registration by (—) 1.3%

Placements effected through the Efforts of the Employment Exchanges

1. Total No. of applicants placed in employment ..2818

(*a*) Out of (1) above, No. of Ex-servicemen placed in employment .. 89

(*b*) No. of Physically-handicapped applicants placed in employment .. 43

(*c*) No. of Repatriates placed in employment

Burma Repatriate .. 35

Srilanka Repatriate. 33

(*d*) No. of Professional and Executive Standard applicants placed in employment .. 62

Other Services rendered by this Department

(*a*) No. of applicants who received guidance in the matter of chosing their careers. 11208

Employment Exchanges have experienced shortage of qualified personnel in respect of various occupations for which vacancies were notified to them. For some occupations shortages were felt every month by Employment Exchanges, while for some other occupations, shortages felt have been only periodic,. The following are the occupations for which Employment Exchange have experienced shortage of suitably qualified personnel in the month of May 1975. In order that the readers may benefit, full details of qualifications etc., prescribed for these occupations including information on communal reservation are given against the occupations. This is published to help the job seekers.

DETAILS OF SHORTAGE OCCUPATIONS

Occupations reported to be in short supply	*Details about the qualification, experience prescribed and reasons for the shortage as furnished by the Employment Offices.*
(1)	(2)
1. Stationery Engine Driver	SC candidates who have passed in VIII std. and in possession of First Class Motor Engine Driver Certificate granted under Inland Steam Vessel Act or Harbour Crafts from Non-priority and age 18 to 35 years are not available.
2. Basket Ball Coach	Candidates with N.I.A. qualification are not available.
3. Lecture work and Supervisor	Women candidates with requisite qualifications and experience are not available
4. Loom Attender	SC candidates with minimum 3 years of experience in handloom weaving and preparatory process in non-priority category are not available.
5. Urdu Trained Higher Grade Teacher	Candidates from SC/ST in priority category are not available.

Occupations reported to be in short supply.	Details about the qualification, experience prescribed and reasons for the shortage as furnished by the Employment Offices.
(1)	(2)
6. Weaving Demonstrator	Candidates from SC in priority category with Matriculation or equivalent diploma in Handloom technology or its equivalent with not less than 2 years of experience are not available
7. Registered Medical Practitioner	Candidates with certificate in in Siddha 'A' Class are not available.
8. Expert weaver reserved for SC	Candidates from SC in Non-priority category with a pass in Middle School Standard and experience for not less than 10 years in handloom weaving are not available.
9. Springman-cum-fitter	Candidates passed in S.S.L.C. and minimum 5 years' experience in a reputed workshop are not available.
10. Meter Reader reserved for SC/ST.	Candidates completed School Leaving Certificate and experience in the repair of meters for a period of 2 years are not available.
11. Health Visitor	Candidates from SC from Non-priority category with Health Visitor Training Certificate and age 18 to 35 years are not available.
12. Higher Grade Teacher	Candidates from SC with Higher Grade Trained Teachers Certificates are not available.
13. Steno-typist	Candidates from SC with requisite qualifications are not available.
14. Assistant Driver	Candidates from SC/ST and Backward Class and Open Competition and Ex-Servicemen in non-priority category with VIII Std. pass knowing Swimming possessing First Class Motor Engine Driver Certificate issued under Inland Steam Vessel or Harbour Crafts are not available even after circulation to all Employment Exchanges of the State.
15. Serang Grade II	Candidates from SC/ST and Open Competition and Ex-servicemen under non-priority category possessing Master or Serang Certificate issued under Inland Steam Vessels Act are not available, even after State circulation to all Employment Exchanges
16. Fireman	VIII. St. passed candidates with knowledge of Swimming, required physical measurement and experience from ST in non-priority category are not available.
17. Bamboo Work	Candidates studied upto VIII. Std. and knowledge in bamboo article making are not available.
18. Cane Work Instructor	Candidates studied upto S.S.L.C. and knowledge in cane making articles are not available.
19. Rural Medical Practitioner	Candidates from SC/ST with 'A' Class or 'B' Class Practitioner registered in the C.B.I. Medicines are not available.
20. Line Inspector Grade I.	Candidates pass in the VIII Std. or a pass in the III Form with practical experience in electrical operation and maintenance for a period of not less than 8 years are not available.
21. Sanitary Inspector	Candidates from SC/ST with Sanitary Inspectors course passed are not available.

Occupations reported to be in short supply.	*Details about the qualification experience prescribed and reasons for the shortage as furnished by the Employment Offiices.*
(1)	(2)
22. Balasevika	(Women) candidates who have passed/failed and trained at (Physical Education Teachers Certificate), S.V. Nagaram or T. Kallupattur for Balasevika are not available.
23. Health Assistant	Candidates from SC/ST with Sanitary Inspector's Course passed are not available.
24. Steno-Assistant	Candidates with S.S.L.C. and Typewriting English and Tamil both Higher Grade and Shorthand by Higher Grade are not available.
25. Urdu Pandit	Candidates possessing degree of a University in Urdu or a degree of B.O.L. or Hons or a completed S.S.L.C. and a title of Oriental Teaching conferred by a University are not available.
26. Secondary Grade Assistant (Women only)	(Women) Candidates with secondary grade and diploloma in Teaching the blind are not available.
27. Physical Education Teacher.	Candidates with Physical Education Teacher's Certificate higher grade are not available.
28. Drawing Master	Candidates with Higher Grade Certificate in Drawing and T.T.C. are not available.
29. Tamil Pandit	Candidates possessing Tamil Pandit's certificate with T.T.C. and with diploma in teaching the blind are not available.
30. Secondary Grade Teacher	Candidates possessing Secondary grade training in Hindi Medium are not available.

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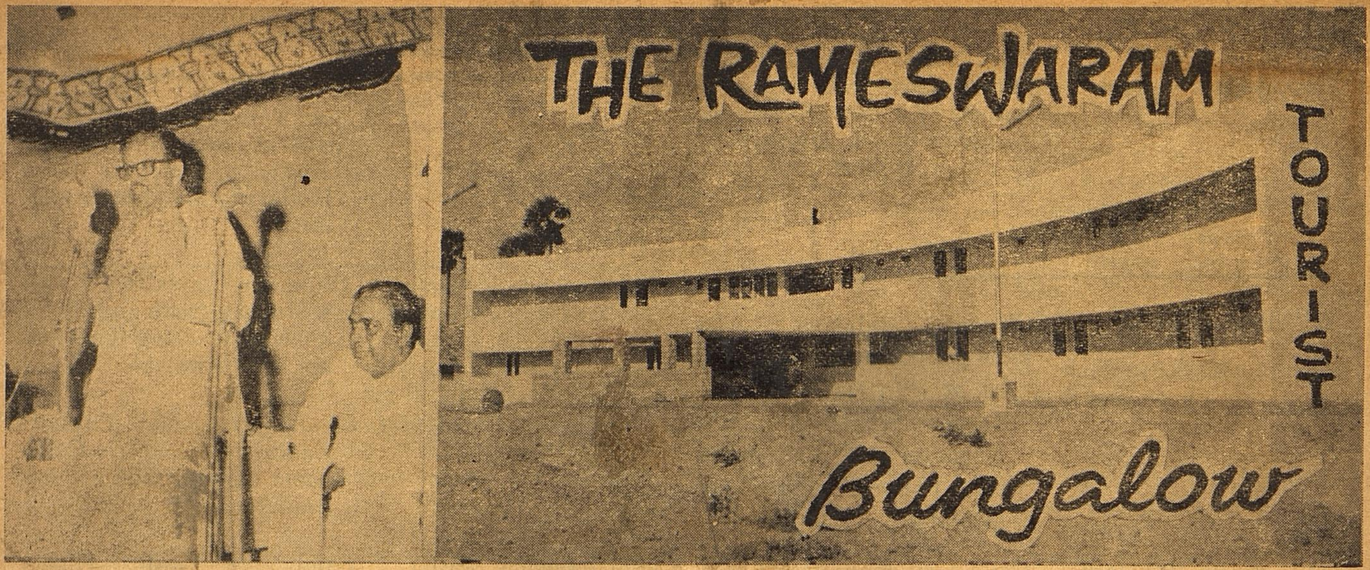

The tenth in the series of Tourist Bungalow under the aegis of Tamil Nadu Tourism Development Corporation was declared open on 21st June, 1975 by Dr. V. R. Nedunchezhian, Minister for Tourism, at Rameswaram. The holy town of Rameswaram situated on an island in the Palk Straits at the extreme South Eastern tip of the Indian Peninsula, is an All-India pilgrim centre drawing pilgrim tourists from all over the country, thereby standing as a true symbol of National integration.

The Rameswaram Devasthanam maintains several types of accommodation for the pilgrims. But the need for a first class accommodation in this town has been felt for a long-time, especially for the foreign tourists. Realising the need for proper accommodation for tourists at this All India Pilgrimage Centre, the Department of Tourism, Government of India, sanctioned the construction of a Tourist Bungalow at Rameswaram at a cost of Rs. 7.30 lakhs on a 6.5 acre plot. The State P.W.D. was asked to build the Tourist Bungalow. The Tourist Bungalow was completed in all respects in a record time of 18 months.

On the request of the Government of India Tourism Department, the Tamil Nadu Tourism Development Corporation took over the bungalow recently and furnished it at a cost of Rs. 1.5 lakhs.

Tenth Link in the Chain of Tourist Bungalows

Rameswaram Tourist Bungalow joins as the tenth link in the chain of Tourist Bungalows run by the Tamil Nadu Tourism Development Corporation in the State. The Corporation is already running Tourist Bungalows at Tiruchi—Madurai—Tiruchendur—Kanyakumari (two units)—Hogenakkal—Ooty—Kodaikanal and Yercaud.

About the building and facilities offered

The Tourist Bungalow at Rameswaram has two floors with 17 Double rooms and one Dormitory capable of taking 6 to 10 beds. All the rooms are bath attached with modern conveniences. Every room has a Private Balcony to have a grand view of the sea in front. The Tamil Nadu Tourism Development Corporation has furnished the building tastefully and added on many comforts and conveniences for the tourists. In keeping with the policy of the Corporation, a Catering Technologist has been appointed as the Manager of the unit. Catering and recreational facilities have also been provided in the Tourist Bungalow.

Tariff

In order to promote this place, the Tamil Nadu Tourism Development Corporation has kept its tariff low. The bath-attached Double rooms with the private balcony will cost Rs. 16/- only per day. A bed in the Dormitory which is also bath attached with a Balcony will cost Rs. 3/- per day only.

Rameswaram Halt for Package Tourists

With the opening of the Tourist Bungalow at Rameswaram, the Package Tourists coming on Tamil Nadu Tourism Development Corporation's 8-day Package Tour get an opportunity to spend the night here. It was their felt need for a long time. What was a ' Halt and Go ' centre becomes a centre of relaxation and detailed study of the temple architecture and its aesthetic beauty. Consequently, the 8-day Package Tour has been converted into a 9-day Package Tour by popular demand.

Thiru V. R. Nedunchezhian, Minister for Tourism, in his address, appealed to the Government of India to expedite the construction of a road link between Mandapam and Rameswaram Island, whereas Thiru A.V.P. Asaithambi, Chairman, Tamil Nadu Tourism Development Corporation (TTDC) suggested that a ferry service could be started between the mainland and the island for movement of men and material including vehicles.

Thiru C. Ramachandra, Managing Director, TTDC said the tourist bungalow had been built with financial assistance (Rs. 7.30 lakhs) from the Union Ministry of Tourism. The land (6.5 acres) had been provided by the State Government. Thiru D.S. Dheenadayal, Assistant Director, TTDC, proposed a vote of thanks.

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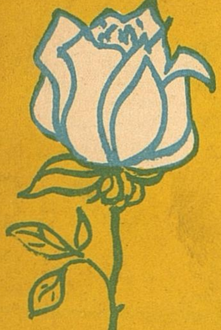

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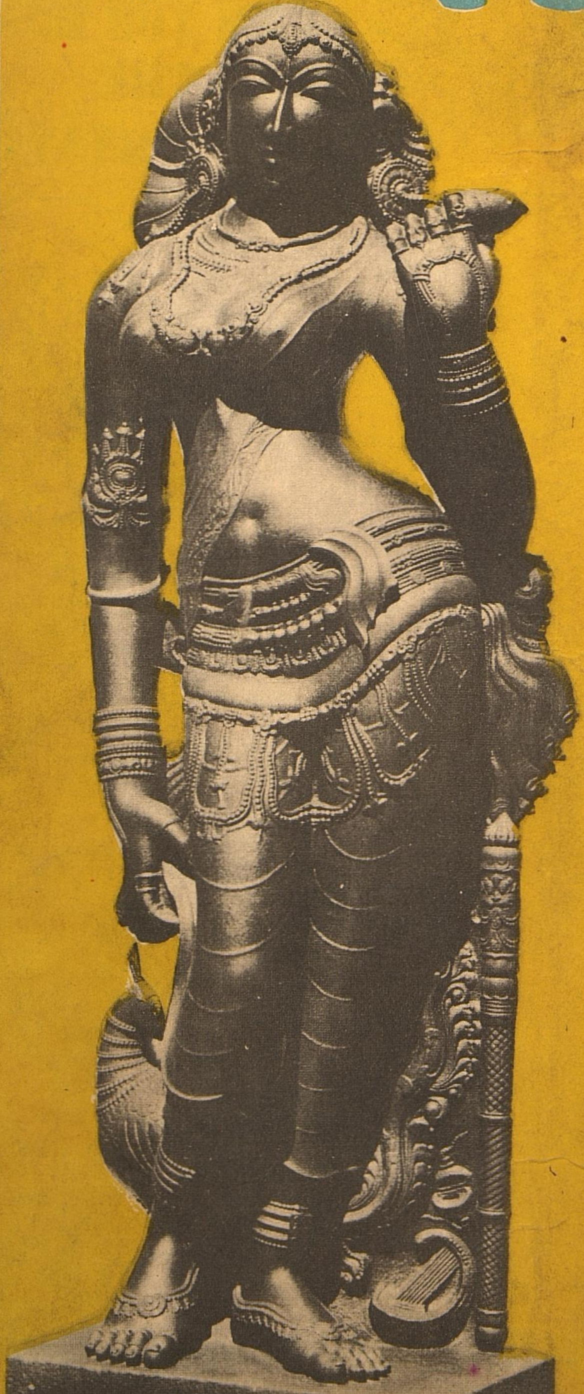
Poompuhar



FOR A REAL INSIGHT INTO

Tamil Culture

Kaveripoompattinam, known as Poompuhar in its more fortunate days was a well laid out port town which boasted of a separate settlement for the foreigners. Much of the archaeological remains still are there for us to see.

In addition, the recently constructed art gallery is the first attempt,—after many centuries,—at group-sculpture for which Tamil Nadu is justly famous. In the form of group-sculptures and also in individual figures, a remarkable edifice to recreate the life and times of the Tamil classic Silappathikaram—The Story of the Anklet—has come up at the Kaveripoompattinam Art Gallery.

Apart from this Art Gallery, more new edifices have come up such as Ilanji Manram, Nedungal Manram, and Paavai Manram which re-create the life of Tamil Community in early times. Above everything else, Poompuhar has now a fine Tourist Bungalow. Poompuhar is a Culture Complex and a fine beach resort.

FOR FURTHER DETAILS

Contact:

RECEPTION OFFICER,
POOMPUHAR ART GALLERY,
(Via) SIRKALI, THANJAVUR DIST.